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RURAL AND URBAN LIVING STANDARDS IN VIRGINIA

WILSON GEE AND WILLIAM H. STAUFFER

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**RURAL AND URBAN LIVING STANDARDS
IN VIRGINIA**

THE UNIVERSITY OF VIRGINIA INSTITUTE
for Research in the Social Sciences
Institute Monograph No. 6

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BY

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Milan
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THE INSTITUTE FOR RESEARCH
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UNIVERSITY, VIRGINIA
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PREFACE

THE study presented in the following pages was conducted as a project in the Institute for Research in the Social Sciences at the University of Virginia. It was begun in September, 1928, and the field work was completed in March of the following year. The funds available for the project necessarily limited the sample and the time over which the study extended. The scope of the project is an exceedingly ambitious one, covering as it does both rural and urban areas and three groups of families in each of these. No one is more aware of the deficiencies in this regard than are the authors, but a comparison of the results with those of similar groups arranged from the study of the United States Department of Agriculture of 2,886 farm families in eleven different states reassures them that even a limited sample may accurately reveal a great many significant social phenomena. Besides, the comparative rural and urban approach, and the collection of data by three rather well-defined groups are new methods of attack which it is believed may be employed with much advantage on a more extended scale. The further facts that no standard of living studies have included Virginia farm or urban families and that the cost of living data by cities in this area are quite limited, constituted one of the most important reasons for seeking knowledge in this regard specific for the State of Virginia.

Dr. Edith Hawley, Senior Food Economist of the Bureau of Home Economics, United States Department of Agriculture, has generously contributed the excellent chapter on the "Nutritive Value of Foods Consumed by City and Farm Families in Virginia", which represents a technical interpretation of the data obtained by the authors in the field.

The authors wish to acknowledge also their indebtedness to Dr. E. L. Kirkpatrick of the University of Wisconsin; Dr. Douglas S. Freeman, Editor of the *Richmond News-Leader*; Dr. C. J. Galpin, Economist in Charge, Division of Farm Population and Rural Life Studies of the Federal Bureau of Agricultural Economics; and to Dr. C. C. Zimmerman of the University of Minnesota, for valuable suggestions.

The local contacts necessary to the successful pursuit of the study were greatly facilitated by the farm and home demonstration agents in Bedford and Culpeper counties, and it is a pleasure to acknowledge our appreciation of their fine spirit of cooperation. In Lynchburg, the officials of the Retail Merchants Credit Association, the department of Sociology at Randolph-Macon Woman's College, the

Secretary of the Chamber of Commerce, and representatives of a number of other organizations were very helpful in the advice and information furnished.

Mrs. Abraham Berglund and Mr. R. H. Barker of the University of Virginia furnished highly effective aid in the collection of schedules in the city of Lynchburg, as did Mr. A. J. Eastwood of the same institution, in the gathering of the farm schedules. Messrs. R. H. Barker and W. L. Leap, graduate students in the University of Virginia, did a great part of the tabulation of the data.

To all of these and to our colleagues on the Institute staff, both research and office, the authors wish to express their appreciation, but in no way to charge them with the responsibility of any shortcomings of this monograph.

WILSON GEE,
WILLIAM H. STAUFFER.

*University of Virginia,
September 24, 1929.*

TABLE OF CONTENTS

| | PAGE |
|--|------|
| PREFACE | VII |
| CHAPTER I. THE PROBLEM AND ITS SETTING..... | 1 |
| 1. The Nature of the Problem..... | 1 |
| 2. The Distinctiveness of Approach..... | 7 |
| 3. Size and Composition of the Sample..... | 10 |
| 4. Selection and Description of Areas..... | 12 |
| a. Method of Selection..... | 12 |
| b. Culpeper County..... | 13 |
| c. Bedford County..... | 14 |
| d. Lynchburg | 15 |
| CHAPTER II. FARM LIVING STANDARDS..... | 16 |
| 1. Some General Considerations..... | 16 |
| 2. Distribution of Farm Living Costs in Virginia..... | 19 |
| 3. Requirements for Primary Needs of Life..... | 20 |
| 4. Cost of Food..... | 25 |
| 5. Housing | 28 |
| 6. Clothing | 30 |
| 7. Household Operation and Equipment..... | 32 |
| a. The Automobile as a Factor in Family Living..... | 34 |
| b. Household Furnishings and Equipment..... | 36 |
| 8. Expenditures for Personal Items..... | 37 |
| 9. Health and Farm Living Costs..... | 38 |
| 10. Life and Health Insurance..... | 40 |
| 11. Advancement and Recreational Costs..... | 42 |
| CHAPTER III. SOCIAL AND ENVIRONMENTAL FACTORS..... | 45 |
| 1. General Statement..... | 45 |
| 2. Number of Children in Farm Families of Different Groups.... | 45 |
| 3. Educational Attainment in Farm Families..... | 47 |
| 4. Occupational Status of Children of Farm Families..... | 52 |
| 5. Environmental Factors in Farm Living Standards..... | 56 |
| a. Farm Acreages Among the Three Virginia Groups..... | 58 |
| b. Physical Surroundings of Virginia Farmers..... | 59 |
| 6. Cultural and Recreational Activities..... | 61 |
| a. The Utilization of Time on Farms..... | 61 |
| b. Time Spent in Reading..... | 64 |
| c. Community Visiting..... | 65 |
| d. Trips to Town..... | 65 |
| e. Entertainment | 66 |
| CHAPTER IV. CITY LIVING STANDARDS..... | 69 |
| 1. Introduction | 69 |

| | PAGE |
|---|------|
| 2. City Population..... | 71 |
| 3. Nature of the City Sample..... | 72 |
| 4. Living Costs for City Families..... | 73 |
| 5. Food | 76 |
| 6. Clothing | 78 |
| 7. Housing | 80 |
| 8. Primary Wants..... | 82 |
| 9. Household Operating Expenses..... | 82 |
| a. Fuel and Light..... | 83 |
| b. Automobiles | 84 |
| c. Furnishings and Equipment..... | 85 |
| 10. Personal Items of Expenditure..... | 86 |
| 11. Health | 88 |
| 12. Insurance of Life and Health..... | 89 |
| 13. Advancement and Recreational Costs..... | 91 |
| CHAPTER V. SOCIAL AND ENVIRONMENTAL FACTORS..... | 95 |
| 1. Introductory Statement..... | 95 |
| 2. Number of Children in City Families..... | 95 |
| 3. Educational Attainment in City Families..... | 97 |
| 4. Occupational Status of City Families..... | 102 |
| a. Occupations of Parents..... | 102 |
| b. Occupational Status of Children..... | 102 |
| 5. Cultural and Recreational Activities..... | 104 |
| a. Length of Working Day..... | 104 |
| b. Time Spent in Reading..... | 109 |
| c. Visiting in Community..... | 110 |
| d. Entertainment | 110 |
| 6. Environmental Factors in City Living Standards..... | 111 |
| CHAPTER VI. NUTRITIVE VALUE OF FOODS CONSUMED BY CITY AND FARM FAMILIES IN VIRGINIA..... | 115 |
| 1. The Task and Sample..... | 115 |
| 2. Method of Analyzing Food Consumption Data..... | 115 |
| 3. Food Habits of Farm and Urban Families..... | 117 |
| 4. Summary of Food Analysis..... | 122 |
| GENERAL SUMMARY | 124 |

CHAPTER I

The Problem and Its Setting

1. THE NATURE OF THE PROBLEM

A GREAT deal of stir and commotion in the realm of physical activity is usually assumed to be the accompanying evidence of something worth while that is going on in a material way. The constant din of the hammer and the electrical riveter means a large building in process of construction; the hum and roar of the spindle and of the loom indicate the feverish motions involved in the processes of manufacturing textile goods. On the other hand, towns in mining areas have been known to go up almost over night, and in an amazingly short time the operations of their inhabitants have exhausted the limited mineral resources of an area, and left the mushroom development to crumble under the desiccating effects of time and weather. Often, too, the charlatan interrupts the stream of busy traffic; through dint of his vociferous efforts, inveigles the innocent and unsuspecting, causing the more sophisticated to pause in curiosity for a moment, but soon to move on unimpressed.

A somewhat parallel situation exists in the field of human intellectual endeavor. An investigator, a little bolder or more original than the rest, explores a new field. The freshness of his approach, together with the nature of his findings, attracts the rank and file, and soon a crowd of students are engaged in attacking the problem from its many possible angles. If the phase of intellectual intrigue has dimension, new depth, width and breadth are revealed. If the prospective area is shallow of meaning, its possibilities are soon sounded, and the movement is on toward what appears a more alluring goal of opportunity.

Such an area of intense mental focus for several years past is the study of standards of living among various classes of humankind, scattered over widely different geographical areas. The exploration continues with acceleration; so the presumption is that the discoveries thus far have been significant, and that the resources of the problem are still far from exhausted both in the determination of actual fact and in the analysis of the accumulated data.

There is an old saying that "the proof of the pudding is in the eating." A companion quotation for purposes of introducing the problem under consideration is that of Goethe to the effect that "one must

be something in order to accomplish something." The real meaning in life is in the various ways in which it finds expression—just where its emphases are placed. Does the individual and the class live on a low plane? If so, is it because he is incapable of living on a higher level? Moreover, in what measure is such incapacity one of inherent ability, of cultural heritage, or of actual material limitations? The determination of even an incomplete and largely unsatisfactory scale of measuring such factors makes for a more intelligent approach to the problem of providing a civilization that insures the largest amount of self-expression to all humankind. Such a provision becomes indispensable when it is considered that the standard of living on the part of individual and of group is the best measure possible of achievement within that individual or group. Such basic considerations as these in measuring human welfare lend unusual significance to the numerous efforts which are being made towards the assessment of just what human individuals are getting out of the lives which they are leading.

No such investigations have been made heretofore in the state of Virginia. It was largely because of this fact, and also, with the idea of testing out certain new methods of attacking problems of this nature that the study reported in the following pages has been made.

Several reviews of the literature bearing on standards of living have been made in recent years. The most recent of these is that of Kirkpatrick¹ in his volume on "The Farmers Standard of Living." This authority, who is the most extensive worker in this field of rural knowledge, limits his definition of "standard of living" to that of the family. He states that the term is "*the measured or the evaluated amounts of the different kinds and qualities of economic goods involved in meeting the physical and psychic needs and wants of the different individuals composing the family.*" He distinguishes the "standard of family life" as the measure of "*the satisfactions or values evolving from the acquisition and the use of goods and the use of time in the fulfilment of human wants.*"

Most definitions are arbitrary, and while such human exercises are necessary in defining a given area of knowledge, from their very nature the resulting definitions are unsatisfactory. The former definition involves the quantitative measurement of the various economic goods utilized in the pursuit of life on the part of a family and its

1. Kirkpatrick, E. L. *The Farmers Standard of Living*. Century Co., 1928, pp. 15, 16.

component individuals. But no such body of data can have meaning except as they include the satisfactions of life derived from the use of these goods. Obviously the "standard of life" is much the more intangible, but it is the important phase of the picture which it is desired to visualize. Consequently, in this study, the term "living standards" is used in order that too technical a definition may be avoided, and that the analysis arrived at may include both what Kirkpatrick defines as standard of living and standard of life.

Streighthoff,² another outstanding student of these problems, quite tactfully evades the restrictions of too clear cut definition, pointing out that the standard of living is the result of the two forces, environment, comprising time, income and class, and individuality. He creates in a broad sort of way a normal standard of living, and characterizes it as "one which conduces to healthy symmetrical development, physical, mental and moral. The standard is properly counted ideally high in proportion as it achieves this end, and especially as its emphasis falls upon the intellectual and moral elements."

In addition to these terms there are several others which have been used in discussing the underlying problems. As Sims³ points out, there is the term "a subsistence standard of living," which has been used to denote a scale of living embracing only the physical or animal needs of existence. "A comfort standard of living," and the term of the English economist, Alfred Marshall, "efficiency standard of life or living," are applied to a scale of expenditure that allows in some measure for needs of men as social creatures as well as for their mere animal requirements. Another term, "a standard of luxury," is used to describe a level of living in which all sorts of wants are indulged. These and a number of similar terms have been employed to designate degrees of deviation from the consciously or unconsciously assumed normal standard of which Streighthoff speaks.

In addition, as Lundquist and Carver⁴ point out, among economists "standard of living" means something still more technical, and they say "definite." It includes all those things which the individual under discussion will insist on having before he will marry and undertake the support of a family. In other words, the individual's

2. Streighthoff, F. H., *The Standard of Living Among the Industrial People of America*. Houghton, Mifflin Co., 1911, p. 5.

3. Sims, Newell L., *Elements of Rural Sociology*. Thomas Y. Crowell Co., 1928, p. 488.

4. Lundquist, G. A. and Carver, T. N., *Principles of Rural Sociology*. Ginn & Co. 1927, p. 234.

standard of living is of such importance to him that he will sacrifice his desire for a family before he will lower his standard of living, or will postpone marriage until his income will enable him to support a family according to his standard of living. Only those articles of consumption are technically a part of his standard of living which he prefers to marriage and for which he will actually postpone marriage indefinitely.

This is a sufficient statement of the case to indicate how pervasive are the ramifications of the influence of the standard of living among classes and individuals. Streighthoff⁵ doubts whether there can be found a better criterion of character—or of culture—than how income is disbursed.

Of course writers from the earliest times have always been interested in how their fellow humankind have lived—what sort of houses they had, the kinds of clothes they wore, the diet which they consumed, the sort of work they did, and the forms of recreation which engaged their leisure and often other time, also. (But statistical studies of family budgets date back to the work of Ernst Engel,⁶ who, in 1857, on the basis of such data in LePlay's monumental *Les Ouvriers Européens*, and some material of his own collection, made a comparative study of the expenditure distributions in families of the lower, middle and working classes in Saxony.) So full of meaning were the results that they have constituted a sort of guide and standard for subsequent studies.

It is worth while to give here one of the tables worked out by this statistician as a basis for the more complete visualization of the laws which he derived from his studies of the problem.

Based on such results, Engel deduced four laws which have been the starting points of succeeding discussions of the matter of standards of living. These were to the effect that:

1. As the income of a family increases, a smaller proportion is expended for food.
2. With an increase in family income, the percentage expended for clothing remains approximately the same.
3. For all of the incomes investigated, the percentage applied to rent, fuel and light remains invariably the same.

5. Streighthoff, F. H., *op. cit.*, p. 9.

6. Engel, Ernst, *Prussian Statistical Bureau Report, No. 1857*, p. 145. Table I. Engel republished his major studies in the *Proceedings of the International Journal de Statistique* for 1895 in a series of articles under the general title *Die Lebenskosten Belgischer Arbeiter-Familien früher und jetzt*. These are based upon Ed Ducpetiaux's Belgian budgets for 1853, and the Belgian Commissioner of Labor Studies for 1886 and 1891.

TABLE 1
PROPORTIONATE EXPENDITURES ACCORDING TO ENGEL

| Items of Expenditure | Proportions of the Expenditure of the Family of: | | |
|---------------------------|---|--|---|
| | 1 | 2 | 2 |
| | Workman with an income of \$225 to \$300 a year | Workman with an income of \$450 to \$600 | Middle-class person with an income of \$750 to \$1,000 |
| 1. Food only | 62.0 per cent | 55.0 per cent | 50.0 per cent |
| 2. Clothing | 16.0 per cent | 18.0 per cent | 18.0 per cent |
| 3. Lodging | 12.0 per cent | 12.0 per cent | 12.0 per cent |
| 4. Light and fuel | 5.0 per cent | 5.0 per cent | 5.0 per cent |
| 5. Education | 2.0 per cent | 3.5 per cent | 5.5 per cent |
| 6. Legal protection | 1.0 per cent | 2.0 per cent | 3.0 per cent |
| 7. Care of health | 1.0 per cent | 2.0 per cent | 3.0 per cent |
| 8. Comfort and recreation | 1.0 per cent | 2.5 per cent | 3.5 per cent |
| Totals..... | 100.0 per cent | 100.0 per cent | 100.0 per cent |

4. With an increase in the family income, there is a constantly increasing expenditure for the cultural wants of life—education, health, recreation, amusements, etc.

Subsequent studies by the Massachusetts Bureau of Statistics of Labor in 1874, 1885 and 1902, as well as those made by the United States Labor Commissioner, were focussed upon the objective of determining the wage level necessary to support the family of the average industrial worker. Cost of living studies were made by More in 1904, and by R. C. Chapin in 1907 for a few hundred families in New York City.

An outstanding analysis of the then existing data on standards of living among industrial people in America was made by F. H. Streithoff, and published in 1911 as one of the Hart, Schaffner and Marx prize essays. The analysis of this investigator, based largely on the objective data of other workers in the field, led him to the opinion that Engel's laws required considerable modification before they could be applied to American workingmen of the present time. Streithoff's restatement of these is as follows:

"As the income increases:

1. The proportionate expenditure for food
 - a. decreases for the country at large from 50 per cent to 37 per cent, but
 - b. in New York City, it amounts to almost 45 per cent of the total outlay until an income of \$1,000 is attained.

2. There is a strong tendency for the percentage of expenditure for clothing to increase.
3. Relative expenditures for housing
 - a. remain about constant for the country at large, falling very slightly after \$400 incomes have been reached, but
 - b. decrease rapidly from 30 per cent, or more, to 16 per cent in New York City.
4. Proportionate expenditures for fuel and light decrease.
5. Expenditure for culture wants increases absolutely and relatively."

Later more extensive studies in a number of widely differently located sections of the nation have served to make more complete the picture of industrial living standards, and have tended to confirm the modifications thus stated by Streighthoff, except in the particular that the percentage expenditure for rent has been found to decrease rapidly for the country at large, instead of the slight fall which he indicated as the characteristic trend.

Until recently the farm standards of living were in a comparatively neglected state of exploration. A substantial beginning in this direction was made by the pioneer study of E. L. Kirkpatrick, *The Standard of Life in a Typical Section of Diversified Agriculture*, issued as a bulletin of the Cornell University Agricultural Experiment Station in 1923. Since that time, the same authority, until recently a member of the staff of the Division of Farm Population and Rural Life of the Federal Bureau of Agricultural Economics, has either himself, or cooperatively through this branch of the government and various state experiment stations, studied living conditions and costs among more than four thousand farm families. This great mass of information is appreciably augmented by studies of Taylor and Zimmerman⁷ in North Carolina (1922), Thaden⁸ in Iowa, Zimmerman and Black⁹ in Minnesota, as well as a number of others completed and reported in progress. It is significant to note the statement of Kirkpatrick¹⁰ to the effect that the results of his extensive studies coincide with Streighthoff's revisions, excepting the percentage for rent in New York City, when total expenditures are substituted for income.

7. Zimmerman, C. C. and Taylor, C. C., *Economic and Social Conditions of North Carolina Farmers*, College of Agriculture, Raleigh, N. C., 1922.

8. Thaden, J. F., *Standard of Living on Iowa Farms*. Iowa State College of Agriculture, Experiment Station Bulletin 238, August, 1926.

9. Zimmerman, C. C. and Black, J. D., *How Minnesota Farm Family Incomes Are Spent*. University of Minnesota Agricultural Experiment Station, Bulletin 234, June 1927.

10. Kirkpatrick, E. L., *The Farmers Standard of Living*, p. 42.

The value of the large number of cost of living studies made among industrial groups by the Federal Bureau of Labor Statistics, the National Industrial Conference Board and other agencies has been a very practical one. They have served as a basis for the intelligent adjustment of minimum wage levels so as to provide at least an approach to satisfactory living standards. While the effect of the similar investigations among farm families, from the very nature of the situation involved, is not as yet discernible, the indirect effects are decidedly beneficial in illuminating an area of knowledge hitherto characterized by the extent of ignorance surrounding it.

A great deal of discussion, for example, has been provoked regarding the relation of the standard of living to the farm income. In discussing this problem, Sanderson¹¹ points out that "the ordinary view is that if we could but increase the farmer's income, his standard of living would automatically rise. From a purely monetary aspect this is doubtless true, that in a majority of cases increased income does result in a better standard of living. The real question, however, is whether increased income produces the higher standard of living or whether it is not merely a condition which makes possible the attainment of a higher standard, a standard previously recognized as desirable and which itself forms the stimulus for increasing the income: "That standards were not, in the long run, determined by wages or other incomes, but that on the contrary standards were themselves the dynamic factor in influencing incomes—is the startling paradox to which all serious study of the subject leads," is the conclusion of Dr. Devine, who is one of our best students of the subject in the field of wage industry." Such points of view, as abstract as they may seem at first glance, are extremely significant in their bearing. The traditional conservatism of the farmer is not likely to lead him into a reckless orgy of spending, out of keeping with his income. For him to do so, of course, would be disastrous. However, progress in civilization comes as a result of the creation of new and rational wants, and the establishment of such ideals in the farmer's mental horizon may well prove an often badly-needed incentive to increased intelligent effort in the operation of his business.

2. THE DISTINCTIVENESS OF APPROACH

In the studies hitherto conducted for the purpose of portraying a complete picture of standards of living, the approach has been made

11. Sanderson, Dwight, "Farmers Incomes and Living Standards." *Journal of Farm Economics*, Vol. VII, No. 1, 1925, pp. 47-8.

separately either to the urban industrial or to the farm group. *So far as the authors of this monograph have been able to determine, the study presented herein is the first one in which the attempt has been made to consider comparatively within the compass of a single research project such data gathered from both rural and urban communities.* It has been for a long time now the view of one of the authors that there are few rural problems which can be intelligently understood without also considering the urban relationships involved. There has been too much of a tendency to think of rural and urban problems as in compartments water-tight to each other. Happily, this method of approach is breaking down. An increasing number of workers in the field are taking the same view as Anderson and Lindeman¹² to the effect "that the nature and size of the city are also conditioned by the nature, abundance and variety of supplies that the hinterland is able to furnish." Thus city and country have in their normal relations become "mutually interdependent." This is true not only in the matter of food. The standard of living set by the city dwellers, particularly in the matter of luxuries of life, and the social and recreational values have overflowed from the city to the country, and the extent of the influence of such more or less intangible factors is now widespread, and deeply effective in producing rural dissatisfaction, resulting in considerable measure in the improvement of rural standards, and the development of a fuller life there, but also stimulating a degree of unrest which uproots the individual from the country and transplants him for better or for worse into the matrix of the city. It is the conviction of the authors that the comparative results in the following pages fully evince the wisdom of the comparative rural and urban approach, in that both phases of the life of the state are considered, the urban picture greatly illuminating the interpretation of the rural situation, and vice versa.

Another novel method of approach has been to study the problem by fairly well defined groups. Customarily the plan, in the rural studies, at least, has been to select representative areas, in some instances within a given state, in others throughout a number of states. All, or practically all, of the families within the selected area were canvassed for schedules, and whatever grouping was done, was made in the tabulations according to expenditure, and in some instances, income groups. In the study presented in the following pages, both the

12. Anderson, Nels and Lindeman, E. C., *Urban Sociology*, A. A. Knopf, 1928, pp. 94-5.

country and city samples were selected according to three somewhat arbitrarily but fairly well defined classes. In each case, the lowest income or expenditure group was sought. This class has been designated as the "poor." The largest quota was derived from the average or typical class, representative of the large body of both rural and urban populations. This class has been called the "intermediate," and not the middle-class, because the customary connotation of that term brings the individuals within it higher than the average levels. The "prosperous" were selected from the wealthiest of the farm population in two entire counties, provided that their wealth was accumulated from the farm. The same classification in the city applied to the uppermost levels of its population, in wealth, social status, and location of residence.

Other classifications no doubt suggest themselves. In the case of the farm sample, the grouping might have been according to ownership or tenancy, large or small-sized farms, colored and white, and similar categories. In the city, the process of selection could have been according to trade or profession. It was felt, however, that human society does rather naturally fall into a lower group, the "poor," a large body of the average or the masses, the "intermediate," and a smaller number of the "prosperous," and it was this rather generally established conviction that determined the choice of categories.

In the selection of the farm families, the aid of the county agricultural agent was enlisted. While his knowledge of the county concerned was not sufficiently detailed to determine the sample in that way, it was entirely adequate to determine intelligent and sympathetic "key" farmers in various sections who did know intimately the families resident in the community where he was located. In this careful, systematic sort of way, based upon opinion to be sure, but informed opinion, the members of the three groups were decided upon. Once this was done, practically no difficulty was encountered in securing the information desired. In the absence of any practical way in a study with limited finance at its disposal to determine income levels in advance of such a selection, it is believed that the results are sufficiently accurate for the sort of classification required in a study of this nature.

In the urban sample, the secretary of the Retail Merchants' Credit Association is a tremendously well-informed person in such matters. An extended interview with this officer gave a rather accurate picture of what represented the "poor," the "intermediate," and the

"prosperous." These classes were found to be located in fairly well-defined sections of the city, which made a house-to-house canvass simplify considerably the transportation problem of the field worker. The opinion of the retail credit association official was confirmed or modified by conference with such individuals as the secretary of the local chamber of commerce, the responsible agent of the Associated Charities, and similar persons. It is believed that this method has made the urban selection about as effective as is possible, and accurate enough to afford a good cross-section of the standard of living in a typical Virginia city.

3. SIZE AND COMPOSITION OF THE SAMPLE

A principal difficulty with a study planned as this one is that it is an extensive undertaking to secure an entirely adequate sample within all classes under consideration. A year's time was available for this study, to cover the entire scope of it—field, tabulation, analysis and composition. Consequently, it was considered advisable to limit the number of families studied to three hundred, these to be divided equally between the rural and the urban selections. Emphasis was centered upon the "intermediate" class, and it was designed to have a minimum sample of seventy-five families in each of the rural and urban portions of this group. The thought was to secure approximately thirty-eight schedules for the "poor," and the same number for the "prosperous" classes. These anticipated goals were arrived at in all except the upper class. The matter of locating families who would measure up to the desired specifications in the rural areas was disappointing, and the close of the period of field work revealed a regrettable deficiency in the farm families which could qualify for the "prosperous" class. In the urban territory, the situation was met more satisfactorily, but even here not up to the point expected. The problem in the city, however, was not so much the sparseness of this group, as the time required to arrange appointments and to complete the schedules.

The investigators confess to these inadequacies of sample, but feel somewhat reassured when the basic tables derived are tested by such generalizations as those of Engel and Streighthoff. The results are such as to lead to the conviction that even the smaller samples of the upper group are full of meaning in the trends revealed, and worthy of a great degree of confidence in the conclusions therefrom.

It was considered advisable to limit the sample entirely to white

families—as desirable as it would be to have a similar picture for the Negro families. The standards of living of the two races are too divergent, and the expenditure levels of the classes among the two races would lead to endless confusion. It would be decidedly worth while to make a separate study for the Negro race in the same localities.

TABLE 2
THE RURAL SAMPLE

| Class | Number of families studied | Average expenditure per family | Number of individuals per household | Average number of children | Number of individuals per family at home |
|--------------------|----------------------------|--------------------------------|-------------------------------------|----------------------------|--|
| Poor | 40 | \$ 892.03 | 4.40 | 3.6 | 4.1 |
| Intermediate | 85 | 1,722.56 | 5.17 | 4.3 | 4.7 |
| Prosperous | 12 | 4,084.30 | 5.58 | 4.2 | 4.7 |

The accompanying table (see Table 2) gives a condensed view of the rural sample, sufficiently complete for the purpose of answering questions arising at this point. Of the 40 families comprising the "poor" rural group, none had an expenditure totaling as much as \$1,200. The 85 families in the "intermediate" class ranged from \$1,200 to \$2,500 in total expenditures. The 12 "prosperous" schedules began at \$3,000 and extended as high as \$6,262. The average expenditures per family in these classes were as follows: poor, \$892.03; intermediate, \$1,722.56; and prosperous, \$4,084.30. The items constituting these totals are listed in detail in the subsequent pages; it is sufficient here to say that they did not include farm expenses. They related to the living expenses of the families.

TABLE 3
THE URBAN SAMPLE

| Class | Number of families studied | Average expenditure per family | Number of individuals per household | Average number of children | Number of individuals per family at home |
|--------------------|----------------------------|--------------------------------|-------------------------------------|----------------------------|--|
| Poor | 35 | \$ 976.80 | 4.29 | 2.5 | 4.29 |
| Intermediate | 78 | 1,958.60 | 5.10 | 3.0 | 4.87 |
| Prosperous | 27 | 6,770.79 | 6.19 | 3.1 | 5.10 |

The 35 families in the "poor" urban group in no instance exceeded \$1,400. The average expenditure was \$976.80. There were 78 "intermediate" families for whom schedules were secured, ranging from \$1,400 to as high as \$2,800. The average expenditure in this group was similarly higher than the corresponding rural group. The upper or "prosperous" urban class averaged \$6,770.79 of expense, and the range was from \$3,000 to \$18,500. As would be expected, these averages are higher than for the corresponding rural classes, and this is especially the case in the prosperous group.

4. SELECTION AND DESCRIPTION OF AREAS

a. Method of Selection

Few states in the nation are more diversified in their agricultural interests than is the state of Virginia. While this condition has saved the state from the extreme post-war depression affecting the other cotton-growing states farther South, the diversity adds to the intricacy of a discussion of rural problems within the borders of the commonwealth. The problem of the truck-raising Eastern Shore is quite different from that of the cattle-raising and general farming Southwest. Conditions in tobacco and cotton regions of the Southside are in decided contrast to the dairy farming areas of northern Virginia. The almost agriculturally-decadent state of certain Tidewater counties presents a picture that is altogether another one to that which is found in the wheat and fruit-growing Shenandoah Valley.

In a necessarily limited sample, the importance of selecting typical areas for study was fully appreciated. On this account much careful thought was given this phase of the problem. An index was constructed for the purpose of attempting a statistical measurement of typicality. The items composing this index were those of average values of land and buildings per farm and per acre, average value per acre of land, excluding buildings, crop values per acre of crop land, average value of all farm property per capita, average value of live stock per farm, gross farm income per capita for all farmers, percentage of farm tenancy, and the ratio of mortgage debt to value and debt per acre for full owner-operated farms. The averages for the state as a whole on these items were set up and convenient brackets established about these figures. The counties were then taken up separately and, where the average figures fell within the brackets, the numerical value of one was given for its occurrence.

The results of such a tabulation show that Bedford and Culpeper

counties conformed in most of these items very closely with the state averages. Of course, there were other counties which also had fairly high ratings in such an index measure of typicality, and a determining factor in the final selection was that both of these areas show a fairly wide diversification of agricultural interests. Obviously, the choice of these areas does not imply that within them can be found all the types of Virginia agriculture—such a requirement would be impossible to meet. Since Bedford County continues to be a large tobacco-growing area, for that reason it was thought advisable to select another portion of the state removed from the cultivation of tobacco so as to insure against the specialized features presented in this type of agriculture.

The urban center chosen for study was the city of Lynchburg. While statistical indices are not so readily available for Virginia cities as for counties, opinion as to typicalness is a safer guide than is true among the counties. This is due to the fact that the cities are fewer in number, and also are more frequently visited and are therefore better known. It was the judgment of a number of thoughtful people who know the state quite well, that in the matter of location, composition of population, traditional background, and diversity of manufacturing interest, no city of the state can be more accurately designated as typical than is true with Lynchburg.

A brief description of these three units selected is given in the following paragraphs in order that the reader may more clearly visualize the setting of the various phases of the problem of living standards discussed in the succeeding pages.

*b. Culpeper County*¹³

Culpeper County is close to the Blue Ridge Mountains, in the Piedmont region of Virginia. It is centrally located in the northern part of the state, and is separated from Fauquier on the northeast by the Rappahannock River. The Rapidan River forms its southern boundary. Two smaller streams, the Thornton and Hazel rivers, traverse the western and northern section.

The present county was formed in 1748. The land area is 384 square miles, in which respect the county ranks fifty-first among the counties of Virginia. The population in 1920 was 13,292.

13. Most of the data descriptive of the areas selected for study has been derived from the excellent compendium on such matters entitled "Virginia," and published by the State Department of Agriculture and Immigration, under the direction of George W. Koiner, Commissioner, Richmond, Virginia, 1926.

The topography is less rugged than that of many Piedmont counties, but several detached spurs or mountains give the southwestern portion of the county a more broken and picturesque appearance. The soil is red clay, chocolate, black silt, sometimes sandy, and is well adapted to wheat, corn, rye, oats, hay and legumes. The leading crops are wheat, corn and legumes. The region is a good fruit-growing one, and apples do well, especially along the mountain sides. Cattle, hogs, and the dairy industry are among the important agricultural interests. Forest products include ties, tan bark and pulpwood.

The main line of the Southern Railway furnishes railroad facilities, traversing the county from northeast to southwest. Important highways from points east, west, north and south intersect at Culpeper, the county seat, in the center of the county. In point of health, the United States government reports the section second only to Asheville. The altitude is about 534 feet above sea level.

Culpeper, the county seat, is incorporated and in 1920 had a population of 1,118. Organization among farmers has grown to a considerable extent in this county. The services of a farm demonstration agent are available to the people of the county. It may very accurately be stated that in progressive agricultural development, Culpeper takes rank among the leading counties of Virginia.

c. Bedford County

Bedford County is also located in the Piedmont section, in the southwest central part of Virginia. The James River forms its northeastern boundary, and the Roanoke River is on the southwest. Numerous smaller streams and creeks drain the interior portions of the county. The land area of the county is 791 square miles, making it fifth in size among the counties of the state. The present political unit was formed in 1753, and is supposed to have been named for Bedford in England, or for an English duke, John Russell, fourth Duke of Bedford, a figure well known in the political life of England. The 1920 Census records a population of 30,669.

The altitude of the region is about 900 feet, although the famous Peaks of Otter, located near Bedford, the county seat, are 4,001 feet in elevation.

The western portion of the county is mountainous, and the topography of the area is somewhat broken. The soils are rather generally productive, of red clay and light gray or slate in nature. Emphasis in farming activities is upon grain, tobacco and tomatoes. The

county leads in the production of late tomatoes for canning, and in the number of canneries in operation. The uncultivated areas are covered with blue grass, indigenous to the area, and the dairy industry, as a result is of considerable importance. The mountainous portions of the county are well adapted to fruit growing.

The main line of the Norfolk and Western Railroad extends from east to west across the middle of the county, and the state highway from Norfolk to Bristol, which also traverses the area, is a magnificent hard-surfaced road.

Bedford, the county seat, with a population of 3,500 is located near the center of the county, on the Norfolk and Western Railway, and the state highway from Norfolk to Bristol. Industrial development is in evidence—tobacco warehouses, canneries, tobacco factory, woolen mills and flour mills. At Big Island, a large pulp and paper mill is located.

The agricultural interests of the county are served by both a county agricultural and a home demonstration agent. The county is a progressive one in community spirit, and ranks well among the agricultural areas of the state.

d. Lynchburg

Lynchburg is situated on the James River, about 200 miles from the Atlantic Seaboard. It is in the Piedmont section of the state, about 650 feet above sea level. The estimated population in 1926 was 38,500 inhabitants. The city is an important manufacturing center, and is excellently supplied with transportation facilities. Three great trunk lines, the Southern extending from north to south, and the Norfolk and Western and Virginian railways from east to west, cross at Lynchburg. The passenger time to Washington, D. C., is five hours; nine hours to Philadelphia; and eleven hours to New York.

Lynchburg is an important dark tobacco market. Other large industries manufacture shoes, cast iron pipe, plows, wagons, candy and other commodities. The city is at the doorway of the coal fields, which makes cheap fuel one of its distinctive manufacturing advantages.

The surrounding farming area is a district famous for the production of dark tobacco, general farming and dairying. The educational facilities are excellent. The public schools are high grade, and Randolph-Macon Woman's College, Lynchburg College and Virginia College are institutions of higher learning located here.

CHAPTER II

Farm Living Standards

1. SOME GENERAL CONSIDERATIONS

THE classificatory terms "poor," "intermediate" and "prosperous" used in this study refer more specifically to the financial status of the individual families than to the operating status, or the manner in which they conduct their farming activities; for it is a fact of experience that a goodly number of farmers may be seen in every community who, despite their persistence in the use of antiquated, makeshift methods, and notwithstanding their lack of planning, somehow manage to present an effective front financially. For example, to make the meaning clear, a "prosperous" farmer is one who is financially successful in his farming operations rather than one who is particularly efficient, though it must be quite apparent that in the main, prosperous farmers are efficient. The converse is perhaps not so largely true.

The three groups under consideration will be found fairly well defined in any given agricultural area today, and this certainly has been the experience in the Virginia areas surveyed.¹ Of course, the matter of degree of poverty or prosperity is a varying factor, conditioned in each area by such factors as the composition and fertility of the soil, the type of farming pursued, and the industry of the farmers as a group. Thus it might be that in one section of the state where soils are of high fertility or where cultivation proceeds generally in an orderly and scientific manner there will be found a proportionately smaller number of farmers designated as "poor" than in an area where the soil fertility is low or where methods more or less obsolete are being applied; moreover, the so-called "poor" farmers of the high fertility area may be in a comparatively much better economic position than those in the area of low fertility. The point here to be made is that poverty and prosperity are, after all, simply

1. Wertenbaker in his "Planters of Colonial Virginia" has shown the idealistic picture of the rural life of that day as predominantly one of large mansions, plantations and slaves to be largely mythical. His study of the rent rolls in Tidewater Virginia demonstrates that there has always been in this state the preponderance of the sturdy yeomanry operating the medium-sized farm units and making for the basis of the intermediate class. This group constitutes the bulk of Virginia's agricultural population. The relatively poor and the prosperous (including the very wealthy) whose numbers are comparatively smaller occupy the end positions of this cross section.

terms used to designate relative values or conditions. Throughout the analyses which follow, this point should be kept clearly in mind.

Progress in the arts and sciences has worked to alter considerably the social and economic habits of the farmer; we may even go so far as to suggest that the farmer has been affected to an even greater degree than has the city or townsman. This has been because of the more recent development of improvements to which the farmer has demonstrated a peculiarly definite response. Illustrative of these more recent change-promoting factors are the automobile, with accompanying good roads, and the increased knowledge of the life of the urban dweller by means of all types of publications, and through the radio. The farmer has emerged from a position of comparative isolation insofar as contacts beyond the sphere of his immediate geographic neighborhood were concerned, and has become an individual with interests of a broader sort. He is member now of a much larger social community, while his attitudes and desires are subject at the same time to much the same modifications as those affecting the city dweller. This feature may in large measure explain the causes back of what in recent years has been designated as the cityward movement.

The other conditioning factor responsible for pronounced change is the economic status of farming generally within the state. Virginia, along with other Atlantic Coast states, suffers from a severe case of the national agricultural malady.² Even before the general agricultural depression of the country had set in, the producers of staple crops in Virginia were in many instances feeling keenly the competition of the lower cost producing areas of the states farther west. During the World War, the seriousness of this situation was temporarily abated; in fact, agricultural returns had never been more profitable throughout the state. Investment and reinvestment were in many instances pyramided on rising land values, frequently upon little more tangible security than that of anticipated high yields. With the depression following the War, there has developed an idea that sinister economic forces are in deliberate conspiracy to harm the farmer. There has been no little danger of the development of a

2. Due to the wide diversity of agricultural interests in Virginia, the post-war depression in the farm industry has not struck the state with such severity as is true in the more specialized farming states farther South and in the West. For a further development of this point of view, see Gee, "Is Rural Life Advancing or Declining in Virginia. What is to Be Done About It?" Richmond News Leader series of articles on "An Appraisal of Virginia." The particular article under consideration appears in that periodical in the issues of March 5 and 7, 1929.

complex of inferiority; an educative program is needed in this emergency. That the Virginia farmer has been the victim of inexorable and inevitable economic forces which have tended to render his position less secure than it has been at any time since the days of Reconstruction is certain. Intelligent understanding and the formulation of a program of remedial activities are the need of the hour, if relief is to be forthcoming. Either that, or the less desirable alternative of an attitude of passivity, which may or may not in the end bring favorable adjustments between prices and costs of production.

We may judge something of the influences for socialization and individual satisfactions within a community by merely viewing the objective features of its environment. The existence of churches in close proximity to the area, adequate school facilities, roads of a sort permitting easy transportation throughout the year, farms which express the spirit of orderly management, are in a very real sense indicative of a type, condition or standard of living superior to that which would exist in a community in an area lacking in these respects. If we were to travel through two communities in which conditions were so contrasted in these objective features we should be able to conclude for ourselves which was the more wholesome; and had we the choice of taking up residence in one of them a great weight in the matter of our decision would be given to these external evidences.

While the foregoing judgment would in all likelihood be well made in the case of an entire community, it does not follow that we may draw as conclusive evidence in the standard of a particular family by a similar analysis of objective features. For though the individual family does give expression to these features, we can infer little of the real home life of the group in this way. Prosperity alone is not indicative of high individual standards, though we should expect to find higher standards generally where wealth and income were greater.

Seeing that wealth and income fall short as offering a definite measure or index of the standard of living in families, we may turn for examination into the merits of the expenditures which occur within the family unit in the hope of finding there some fair measure of the standard of living which the family holds. And may we not at the outset recognize that dependent, not upon what the family receives in the way of money income but upon what it receives in the way of material and psychic satisfactions and enjoyments is to be made the whole test of the standard of living? Penury may be concomitant with extensive income; it cannot accompany wholesome liv-

ing. Prodigality may, on the other hand, accompany similarly high incomes, yet if the values received are deficient in those features which are indicative of spiritual and psychic uplifting, what is expended may be productive of results positively harmful. If, however, we should set down some arbitrary classification of the items of expenditure more or less common to all families, and then proceed to secure for a representative number of families the facts of their respective budgets, the resulting analysis might furnish us with a somewhat convincing picture of living standards.

2. DISTRIBUTION OF FARM LIVING COSTS IN VIRGINIA

The average annual cost of living for poor farm families in this study is \$892.03. This includes all of the cash expenditures as well as an estimated money value of the goods which were produced by the farm and consumed by the farm family.³ The intermediate group have average expenditures totaling \$1,722.56, or 93 per cent in excess of those of the poor families, while those families designated as prosperous spend \$4,084.30, which amount exceeds that of the poor group by 358 per cent, and of the intermediate group by 137 per cent. Thus we find great disparities in the absolute dollar expenditures of these groups. If we take the intermediate group as representative of the major number of families we discover that below this group there exists a considerable fragment of the farm population whose aggregate values measured in money terms are represented in a total annual expenditure but slightly in excess of one-half that of the mass of the farmers, and, on the other extreme is to be found another portion of the population whose expenditures are more than one and one-third times greater than the large middle group. We observe in these figures a range of difference between average expenditures of the poor and prosperous of nearly \$3,192. It is our purpose to indicate insofar as statistical data will permit, the significance of the difference above shown with respect to the wholeness of the life experienced by the several groups.⁴

3. The value of food furnished by the farm was calculated on the basis of average wholesale prices obtaining in the nearest market for the period of one year. For firewood the price obtainable at the farm was used, and for ice the actual labor and material charges involved in its harvesting.

4. A part of the difference (negligible however) could be explained through the fact that the number of individuals comprising the families of the poor group studied averaged 4.1, while both the intermediate and prosperous groups had an average of 4.7. This difference of about 15 per cent while it would affect all the items of the budget, to some extent, would be reflected primarily in food and clothing costs.

TABLE 4

DISTRIBUTION OF LIVING COSTS PER FARM FAMILY ACCORDING TO PRINCIPAL ITEMS OF EXPENDITURE AND SOCIAL GROUPS

| Item | Amount in Dollars | | | Percentage Distribution | | |
|---|-------------------|-------------------|-----------------|-------------------------|-------------------|-----------------|
| | Poor | Inter- mediate | Pros- perous | Poor | Inter- mediate | Pros- perous |
| Food | \$435.31 | \$ 677.90 | \$ 994.63 | 48.80 | 39.35 | 24.35 |
| Clothing | 113.10 | 235.09 | 668.75 | 12.68 | 13.65 | 16.37 |
| Rent | 131.13 | 269.30 | 679.17 | 14.70 | 15.63 | 16.63 |
| Household operating expenses | 140.40 | 296.07 | 755.58 | 15.74 | 17.19 | 18.50 |
| Household furnishings and equipment..... | 3.93 | 25.34 | 78.33 | 0.44 | 1.47 | 1.92 |
| Health | 23.09 | 59.08 | 110.42 | 2.59 | 3.43 | 2.70 |
| Personal | 21.66 | 53.21 | 317.55 | 2.42 | 3.09 | 7.78 |
| Advancement and rec- reation | 20.30 | 81.41 | 297.79 | 2.28 | 4.73 | 7.29 |
| Life and health insur- ance | 3.11 | 25.16 | 182.08 | 0.35 | 1.46 | 4.46 |
| Total..... | \$892.03 | \$1,722.56 | \$4,084.30 | 100.00 | 100.00 | 100.00 |

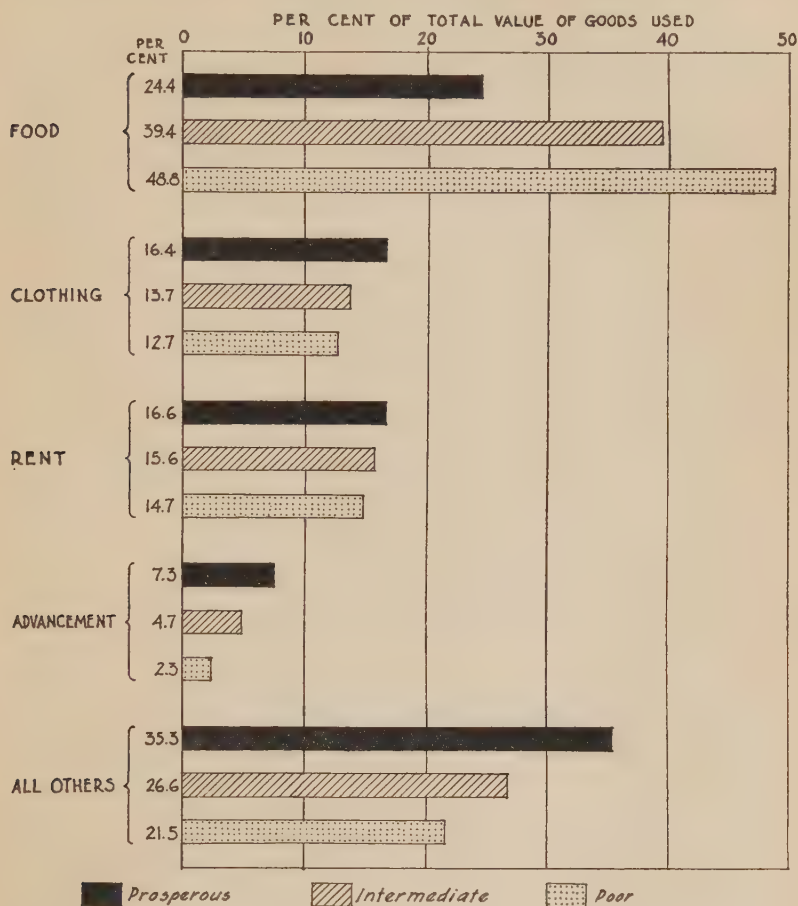
Table 4 contains an analysis of the total expenditures for the three groups of farm families according to items of expenditure. One section of this table shows the amount of the expenditure for each item in dollars, while the percentage of the total amount spent by each group for the respective items of the budget is indicated on the right side of the table. We are interested in both sets of figures: the dollar expenditures because they indicate the differences of absolute costs as between the poor, the intermediate, and the prosperous groups; the percentage figures because they inform us as to the relative weights with which each of the several items of expenditure bears upon the total costs for each group.

3. REQUIREMENTS FOR PRIMARY NEEDS OF LIFE

The minimum existence requirements of individuals living in a civilized world are an adequacy of food to sustain life, a sufficiency of clothing to meet the barest requirements of decency—or custom, if you prefer—and a form of shelter appropriate to the climatic conditions of the area. In some parts of the world the items of shelter and clothing are matters of simple solution, if indeed they are met at all, and the requirement for food presents no problem greater than the need of expending what to us seems to be energy of a negligible sort. However, for people living in the temperate regions, the problems of satisfying these basic needs become more important, and the

FIGURE 1

PERCENTAGE DISTRIBUTION OF LIVING COSTS PER FARM FAMILY ACCORDING TO PRINCIPAL ITEMS OF EXPENDITURE AND SOCIAL GROUPS



Prosperous,
Intermediate,
Poor,

12 Families,
85 Families,
40 Families,

Total Living Costs, \$4,084
Total Living Costs, \$1,723
Total Living Costs, \$ 892

individual must exert himself for a considerable portion of his life in supplying himself therewith. Indeed, individuals who earn little in the way of money frequently devote all of their physical energies to eking out a bare existence. As we progress upward in the economic scale and enter the ranks of those who are better off, we find that the energies of man are productive of more satisfactions than

those embraced in the mere needs for existence. It is this emergence from the bare subsistence level that marks progress into those conditions of living that are more than simply tolerable.

TABLE 5
COST OF PRIMARY⁵ WANTS

| | Amount | Percentage primary wants are of total living costs | Percentage left for other living costs |
|--------------------|-----------|---|---|
| Poor | \$ 679.54 | 76.18 | 23.82 |
| Intermediate | 1,182.29 | 68.63 | 31.37 |
| Prosperous | 2,342.55 | 57.35 | 42.65 |

Table 5 illustrates the decreasing importance in the total budget of costs attributable to primary needs as we emerge from the lower conditions of living to the higher. Food, clothing and housing take slightly more than three-fourths of the total expenditures in the poor families, a little more than two-thirds of the total expenditures of the intermediate group, and slightly less than three-fifths of the total expenditures of those designated as prosperous.

This means that when the bare requirements for existence are met, the families comprising the lower levels of expenditure are greatly limited in funds available to provide satisfactions of a cultural or aesthetic sort. Thus the poor families, after meeting the basic needs for existence, have spent all but 24 per cent of their total available funds, whereas the prosperous group finds itself possessed of nearly 43 per cent with which to meet needs and desires of life beyond those of pure physical sustenance.

We need to observe also that in the progress to the higher levels we experience a higher degree of satisfaction of the primary wants as is evidenced by the increase in dollar expenditures for these wants. Thus for the combined costs of food, clothing, and shelter, the intermediate group spends approximately 75 per cent more than the poor group; while for the prosperous group, these expenses are about twice as great as for the intermediate group.

In a study of farm families made in eleven states published in 1926 by the United States Department of Agriculture, the costs of living are compiled in such manner as to permit the construction of a table fairly comparable in certain respects with the data developed

5. "Primary wants" here is used to embrace the aggregate costs of food, clothing and rent.

originally in the Virginia study. No designation was made in the Department of Agriculture study of the classes poor, intermediate, and prosperous, the classifications there being a series of ten expenditure groups. However, it was possible to arrange the expenditure groups through consolidation into a grouping which embraced a range of expenditures almost identical with those of the Virginia study. Thus arranged, the average total expenditures for each of the three groups were closely parallel to those found for the Virginia families.

TABLE 6

COMPARISON OF EXPENDITURES FOR VIRGINIA FARM FAMILIES WITH THOSE FOUND IN ELEVEN OTHER STATES⁶

| | Under \$1,200 | | \$1,200- 2,699 | | Over \$3,000 | |
|-----------------------------------|------------------|-----------------|-------------------|-----------------|-----------------|-----------------|
| | Virginia | Other states | Virginia | Other states | Virginia | Other states |
| Number of families..... | 40 | 917 | 85 | 1,750 | 12 | 136 |
| Average size of family | 4.1 | 3.6 | 4.7 | 4.7 | 4.7 | 6.2 |
| Average size of household | 4.4 | 3.8 | 5.2 | 5.1 | 5.6 | 7.0 |
| Average of all expenditures | \$892.03 | \$934.86 | \$1,722.56 | \$1,715.76 | \$4,084.30 | \$3,778.60 |

Virginia farm families appear to parallel very closely those of the other states in the relationship existing between the costs of satisfying the primary wants of the family. As is shown in Table 7, the Virginia poor group consumes goods for the items of food, clothing and shelter valued at \$680, which represents 76.18 per cent of the total budget, while the corresponding group in the other states averages \$694, or 74.27 per cent of the total budget. Similarly in the intermediate group, the costs of primary wants are \$1,182 for Virginia and \$1,194 for the other states, the percentages of which represent 68.63 and 69.58 respectively of the total budget costs. And for the high expenditure or prosperous group these costs are \$2,343 for Virginia, and \$2,192 for the other states, the percentage relationships being 57.35 and 58.00 respectively.

6. The comparative data of eleven states have been arranged from a study of 2,886 white farm families, living in New Hampshire, Vermont, Massachusetts, Connecticut, Kentucky, South Carolina, Alabama, Missouri, Kansas, Iowa and Ohio, made in 1922-24 by E. L. Kirkpatrick and others, and published by the U. S. Department of Agriculture, as Bulletin No. 1466, 1926.

TABLE 7

COMPARISON OF COSTS OF PRIMARY WANTS OF VIRGINIA FARM FAMILIES WITH FARM FAMILIES OF ELEVEN OTHER STATES

| | Virginia Families | | Eleven Other States | |
|-------------------|-------------------|---|---------------------|---------------------------------------|
| | Cost | Per cent primary wants are of total budget | Cost | Per cent wants are of total budget |
| Poor | \$ 679.54 | 76.18 | \$ 694.32 | 74.27 |
| Intermediate | 1,182.29 | 68.63 | 1,193.83 | 69.58 |
| Prosperous | 2,342.55 | 57.35 | 2,191.59 | 58.00 |

Examination of Table 7 indicates the close correlation of the findings of the two studies. The range of expenditures for the poor group in Virginia had an upper limit in the neighborhood of \$1,200. The average for this group was approximately \$892 and embraced a study of forty families. The more extensive study covering eleven states dealt with 917 families whose expenditures ranged to an upper limit of \$1,200, whose average for the group was \$935 approximately, which figure is but five per cent higher than that of the Virginia families. The size of family in the larger study was one-tenth less than that of the Virginia family.

Passing to the intermediate group, the similarities were even more striking. Eighty-five families in the Virginia group, and 1,750 in the eleven-states group had expenditures ranging from \$1,200 to \$2,700. The average for the group was \$1,723 in Virginia and \$1,716 in the larger study. Here the size of family was identical, being 4.7 in each case.

In the Virginia prosperous group whose expenditures ranged upward from \$3,000, the average for the 12 families studied was \$4,084, while in the eleven-state study this group had average expenditures of \$3,779. The size of family in the latter study was 6.2 as against 4.7 for Virginia.

We may offer several general conclusions as a result of the analysis of the foregoing tables:

1. In the satisfaction of primary wants, the Virginia farmer of the poor group pays a substantially greater proportion of his total available funds than do the intermediate and the prosperous groups.
2. As measured by dollar expenditures, the intermediate and prosperous groups enjoy a higher order of living in respect to the primary wants, since their dollar costs are markedly higher.
3. Compared with the farmers of eleven other states, the Virginia farm families of the three groups bear a very striking resemblance

in the attainment of primary wants in the respective group classifications.

4. The relationships found to exist when the poor group is compared with the intermediate and prosperous groups apply much the same when the intermediate is compared with the prosperous group.

5. After the satisfaction of the primary wants, a larger amount in dollars as well as a larger percentage of total expenditure funds is left for the satisfaction of other needs and wants as we progress from the poor to the prosperous groups.

4. COST OF FOOD

Food is the most important single item in the budget of the farm families. This is true of the three economic groups studied. The average value of food used by families in the poor group is \$435; in the intermediate group, \$678, and in the prosperous group, \$995. With respect to the total family expenditures, food constitutes 48.80 per cent for poor families, 39.35 per cent for families of the intermediate group, and only 24.35 for the prosperous group. The absolute expenditure in dollars is higher as we ascend the economic scale, but the proportional relationship decreases in the same movement.

TABLE 8
FOOD COSTS FOR FARM FAMILIES

| | Virginia | Amount spent per family in: | | |
|--------------------|----------|-----------------------------|----------------------------------|---|
| | | Eleven other states | Percentage of total expenditures | Food costs as a percentage of total expenditures in eleven other states |
| Poor | \$435.31 | \$ 461.82 | 48.80 | 49.40 |
| Intermediate | 677.90 | 722.33 | 39.35 | 42.10 |
| Prosperous | 994.63 | 1,160.03 | 24.35 | 30.7 |

Farm families in eleven other states expend slightly more for food than in Virginia in the poor and intermediate groups, and considerably more in the prosperous group. This difference may be accounted for in part through the fact that the prices of food products were slightly higher in the years covered in the Kirkpatrick study (1922-24) than in the years covered in the Virginia study (1927-28). A further factor is the somewhat larger household reported in the Kirk-

patrick study. In order to measure the weight of this factor, it would be necessary to know the number of equivalent adult males represented in the household rather than the number of individuals.⁷ These figures are obtainable for the Virginia families but not for those in the Kirkpatrick study. We may fairly assume, however, that when these two factors are considered, it is likely that the absolute costs as well as the percentage relationship of the three economic groups would compare favorably as between Virginia farm families and those of other states. The somewhat wider difference in the per cent of the total budget spent for food in the prosperous group of the Kirkpatrick study may be accounted for in the somewhat lower figure for total expenditures than was shown for the Virginia families of this group.

As was suggested in the preceding paragraph, the size of the household has a direct relationship to the item of food consumption, and consequently the cost of food. If, therefore, we can reduce the total food cost to some basis which will eliminate the differences in size of the household, we shall be able to compare with much more certainty the relative costs as between different economic groups. Such a possibility exists in the application of a scale of relative food needs for all members of the family according to age, sex and type of work, which scale is based upon the needs of an adult male.

TABLE 9
COST OF FOOD IN VIRGINIA FARM FAMILIES PER EQUIVALENT ADULT MALE

| | Total cost of food | Equivalent adult males in family | Average cost of food ⁸ per ammain |
|--------------------|--------------------------|--|--|
| Poor | \$435.31 | 3.57 | \$121.93 |
| Intermediate | 677.90 | 4.74 | 143.02 |
| Prosperous | 994.63 | 5.09 | 195.41 |

In Table 9 the differences in food costs for the three groups are made more comparable through the use of the ammain scale. Where-

7. The number of equivalent adult males (designated as the ammain), is the result of the application of a scale of relative consumption values for food consumption of all members of the family, the base of which is the need of one adult male.

8. The term Ammain may be accepted as an abbreviated designation of the Adult Male MAINTenance equivalent. In these calculations, the active nature of the oxidation processes in the farmer's economy was duly considered.

as, in the comparison of household costs the difference between the poor and intermediate groups approximated 56 per cent, on the basis of the ammain scale this difference of greater food cost for the intermediate group is reduced to 17 per cent. Costs of food in the prosperous group over the poor are 129 per cent on the household basis, and 60 per cent on the ammain basis, while in the comparison of the prosperous over the intermediate, the household relationship is 47 per cent higher and the ammain basis 37 per cent higher.

Not only do the intermediate and prosperous groups enjoy a wider variety of foods, but they tend also to use foods that are more expensive and which are beyond the reach of those in the lower economic levels. A more complete discussion of the nature and nutritive value of foods is given in Chapter VI.

One other phase of the relationship of food to the budget of the farm family deserves consideration. A considerable portion of the food needs are furnished from the farm, and a relatively smaller proportion are supplied by purchases from merchants. Poor farmers supply from their own farms 79.27 per cent of the total value of food which they consume—they buy 20.73 per cent of their food.

TABLE 10

DISTRIBUTION OF FOOD VALUES BETWEEN THOSE FURNISHED BY THE FARM AND THOSE SUPPLIED THROUGH PURCHASE⁹

| Group | Source of food supply | Virginia Farm Families | | Eleven Other States | | |
|---------------|-----------------------|--------------------------|---------------------------------|-------------------------------|---------------------------------|-------------------------------|
| | | Value of food per ammain | Percentage of total budget cost | Percentage of total food cost | Percentage of total budget cost | Percentage of total food cost |
| Poor: | From farm | \$ 96.65 | 36.68 | 79.27 | 34.0 | 68.8 |
| | Purchased | 25.28 | 10.12 | 20.73 | 15.4 | 31.2 |
| | Total | 121.93 | 48.40 | 100.00 | 49.4 | 100.0 |
| Intermediate: | From farm | 119.95 | 33.00 | 83.87 | 28.1 | 66.8 |
| | Purchased farm | 23.07 | 6.35 | 16.13 | 14.6 | 33.2 |
| | Total | 143.02 | 39.35 | 100.00 | 42.1 | 100.0 |
| Prosperous: | From farm | 140.93 | 17.56 | 72.12 | 19.4 | 63.2 |
| | Purchased | 54.48 | 6.79 | 27.88 | 11.3 | 36.8 |
| | Total | 195.41 | 24.35 | 100.00 | 30.7 | 100.0 |

Kirkpatrick's study shows that farmers in his lower expenditure group are more dependent upon food purchased than in the case of

9. Determined on basis of food cost per adult male maintenance equivalent.

the Virginia farmer, his figures indicating the percentage of food purchased as 31.2 of the total value of food consumed.

In the Virginia intermediate group the amount of food consumed from the farm is 83.87 per cent of the total value of food, leaving only 16.13 per cent obtained through purchase.

The highest percentage of self-sufficiency of the farmers in this group accords with the traits of thriftiness which are usually ascribed to the middle-class generally, both rural and urban. The Kirkpatrick study of this group shows only 66.8 per cent furnished by the farm and 33.2 per cent purchased. Farm families in the Virginia prosperous group depend upon the merchant for 27.88 per cent of the value of food consumed. This percentage, while higher than that for either of the lower economic groups is still somewhat under that of the high economic group in the Kirkpatrick study, which shows the value of food purchased as constituting 36.8 per cent of the total food value.

Out of this we may conclude that the Virginia farm family in the three economic groups is more nearly self-sustaining with respect to food produced for consumption than are the farmers of eleven states embraced in the Kirkpatrick study insofar as the value of the food consumed may serve as a measure of self-sufficiency.

It was clearly evident at the time the field survey was in progress in Virginia that many of the farmers were neglecting to avail themselves of the possibilities for supplying themselves with food stuffs from their own farms. A surprising number of the poorer group had no gardens whatsoever and in both the poor and the intermediate groups instances could be found where eggs, butter and milk were purchased throughout a good part of the year. The higher percentage of food purchased in the prosperous group is due not so much to a failure to raise food for family use as to the custom of buying certain products which are in a sense precluded to those of lower economic status—foods which are more costly, out of season, and in some measure, fancy foods.

5. HOUSING

The second most costly single item in the family living is that of housing. While in the case of most farm families, there is no separate and specific outlay for the item of rent of dwelling as such, there is, however, no avoidance of the fact that by some direct or indirect effort this item is a legitimate charge which must be considered in arriving at the cost of living. Various means suggest themselves

in placing a fair rental value on the habitations of farm families; the most feasible and practicable method it seemed was to take an arbitrary and uniform percentage of the value of the farm dwelling as such, which rate should be sufficient to cover roughly the item of depreciation, repairs and upkeep, taxes, and interest on investment. The value of the dwelling was determined upon the basis of its size, construction, age, and location.

As the result of the application of this method of ascertaining rental value, it was found that farm families of the poor group spend \$131 annually for rental, which is equivalent to 14.7 per cent of their gross expenditures for family living. The intermediate group with \$269 have a dollar cost twice as great which represents 15.63 per cent of the total expenditures; while the prosperous group reaches \$679, or 16.63 per cent of their total living.¹⁰

It is interesting to observe that the movement of the costs in dollars as well as the percentage of the total expenditures is upward as we ascend the economic scale. In the case of food the dollar expenditures increased while the percentage decreased markedly. From this we might infer with fairness that while the food requirements of the family do have a conceivable limit, no similar biological restrictions operate in the matter of housing, and thus the economic status of the farmer is more fully expressed in the manner of his housing.

A further interesting observation, which will be developed more fully under another head, is the close relationship existing between cost of clothing and rent. Here, again, the movement in dollars and in percentage of total expenditures is upward and the figures tend to parallel closely in each group the respective rental costs.

TABLE 11
HOUSING COSTS OF FARM FAMILIES

| | Virginia Farm Families | | | Eleven Other States | | |
|--------------------|------------------------|----------|--|---------------------|----------|--|
| | Number of rooms | Amount | Per cent of total family expenditures | Number of rooms | Amount | Per cent of total family expenditures |
| Poor | 5.8 | \$131.13 | 14.70 | 5.9 | \$117.32 | 12.55 |
| Intermediate | 7.4 | 269.30 | 15.63 | 7.1 | 217.39 | 12.67 |
| Prosperous | 10.6 | 679.17 | 16.63 | 8.6 | 381.26 | 10.09 |

10. In this study 10 per cent was considered a conservative estimate to cover these items. Other studies which have a comparative value used this same figure.

The housing costs of the Virginia farmer appear consistently higher for all groups than those shown for the farmers of eleven other states in the Kirkpatrick Study. In the latter study the percentages of the budget represented by costs of housing remain approximately the same for the low and middle expenditure group—12.55 and 12.67 per cent, respectively—and decrease substantially for the higher income group, being in that case only 10.09 of the total living cost of the family. From this we might be led to infer that the types of dwelling of the Virginia farmer in the different economic groups compared favorably with those of farmers in other areas. This is conditioned partly upon the assumption that the valuation estimate placed upon the dwelling was consistently parallel in both studies, and while we believe this to be true it is not possible to check against the judgments of the field workers in the Kirkpatrick Study.

Size of the house affords a fair index of comparison, objectively, and here we observe that the number of rooms increases rapidly from the lower to the higher groups. The poor farmer in Virginia has an average of 5.8 rooms in his house. This compares favorably with the finding in the Kirkpatrick Study of 5.9 rooms for the low expenditure group. In the intermediate group, the number of rooms for the Virginia farmer shows a close correlation, also, with the farmers of the Kirkpatrick Study—7.4 and 7.1 rooms respectively. The Virginia prosperous farmer averages nearly one-fourth more rooms than the corresponding expenditure group of the Kirkpatrick Study—10.6, as against 8.6. This difference is even more significant in view of the fact that the household membership of the Virginia farm family in the prosperous group is smaller by 20 per cent than that of the Kirkpatrick Study.

Insofar as size of house furnishes us with an index of the conditions of living, we may justly infer that for the Virginia farmers the size of house correlates well with the economic grouping. For the poor and intermediate groups we have fairly parallel conditions obtaining for the farmers of Virginia and those of other states, while the prosperous group in Virginia enjoys an appreciably higher satisfaction when measured by the space over which the family distributes itself.

6. CLOTHING

What are the clothing needs of the farm family? And to what extent may we say that the dress of the farmer affords an index to his living standard? Obviously, we shall find differences not only be-

tween individuals in different economic groups, but between individuals of different temperament and viewpoint within the same group. Without digressing too far from the topic, we may venture some general statements with respect to the item of dress.

A common notion in the past has been that the farmer's clothing requirements constituted a negligible factor in his living costs. It was presumed that the nature of his work made for clothing of the crudest and cheapest sort, and that his contacts were of a sort which gave adequate excuse for not "dressing up." But, as with many other inaccurate notions of farm life, the truth of these ideas may be questioned.

The matter of personal appearance is not a negligible factor in the index of wholesome living. Admitting the general fact that much of farm labor necessitates the use of sturdy clothing, it need not follow that this is necessarily concomitant with a lack of concern for tidiness and orderly appearance. The psychic as well as the physical relationships apply here as in other occupations and there is no reason for the belief that the life of the farmer does not require a consideration of his personal appearance. (Moreover, with the increasing contacts of the farmer necessitated by the mechanized, urbanized industrial era, the intelligent farmer recognizes the business advantages of good clothes towards promoting his economic well being.

If this challenge against the common notion be charged as a mere expression of opinion, the facts of the costs sustained by farm families on account of the item of clothing should prove more conclusive.

TABLE 12
COMPARISON OF CLOTHING COSTS OF FARM FAMILIES IN VIRGINIA AND
OTHER STATES

| Class | Virginia | Farm Families | Eleven | Other States |
|--------------------|----------|-----------------------------------|----------|-----------------------------------|
| | Amount | Per cent of total living costs | Amount | Per cent of total living costs |
| Poor | \$113.10 | 12.68 | \$115.17 | 12.32 |
| Intermediate | 235.09 | 13.65 | 254.10 | 14.81 |
| Prosperous | 668.75 | 16.37 | 622.97 | 16.40 |

As one might expect, the ability of the higher economic groups to incur heavier expenditures for practically all items of living would not fail to appear in great contrast with the lower groups. Hence we find the farm families of the poor group in Virginia spending \$113

for clothing, while the intermediate and prosperous groups spend \$235 and \$669, respectively. The costs of the intermediate group are twice as great as those of the poor, but approximately only one-third of the prosperous, while the prosperous is five times greater than the lowest group. On the basis of the relationship of clothing costs to the entire living costs for the three groups we have: poor, 12.68 per cent; intermediate, 13.65 per cent, and prosperous, 16.37 per cent.

It was remarked in the section devoted to housing that a close correlation existed between the rental costs and those for clothing. Practically the same movement is observable both in absolute expenditure, as well as in the percentage relationship for both the poor and intermediate groups. In the prosperous group, the percentage is practically the same for housing as for clothing.

Comparison of the Virginia groups with those of the other states reveals a very close relationship in the corresponding groups.

As will be shown later, there is but slight difference between the amounts spent for clothing by the Virginia city families of the poor and intermediate groups and those of the same groups among the farm population. This evidence should go far to dispel the ill-formed notion of the wide disparity between the city dweller and the countryman in the matter of their clothing costs.

The statement that the manner of clothing among farm families tends to grade itself into a fair conformity with economic status and that there are not extreme differences between the corresponding economic groups in the country and the city seems to be valid in view of the statistical data which are available.

7. HOUSEHOLD OPERATION AND EQUIPMENT

An appreciable part of the cost of family living relates itself to a group of items which we may, for want of a better term, designate as household operating costs. Embraced in this general term are such items as cost of labor for household purposes, cost of fuel and light, telephone, postage expense, the operation of the automobile for family uses, and all of the other incidental costs which may be chargeable to the operating phases of the household.

As in the case of the primary wants of the family, there is, in a large measure, a minimum requirement of expenditures under this head, regardless of the economic status of the family—an outlay which must be incurred by all families. On the other hand, a part of the expenditures chargeable here are in excess of the minimum re-

quirement for decency in living, and through the approximate measurement of this difference, we may give some indication of relative differences in living standards as between the several economic groups.

Where we find telephones, automobiles and more modern means and methods of providing comfort, we should expect to find a more elevated or wholesome standard of living than where such evidences were absent.

TABLE 13
HOUSEHOLD OPERATING COSTS FOR VIRGINIA FARM FAMILIES

| | Poor | | Intermediate | | Prosperous | |
|---------------------------|-----------|-------------------------------|--------------|-------------------------------|------------|-------------------------------|
| | Amount | Per cent of total living cost | Amount | Per cent of total living cost | Amount | Per cent of total living cost |
| Fuel and | | | | | | |
| Light | \$ 61.23 | 6.86 | \$ 89.16 | 5.18 | \$158.66 | 3.88 |
| Automobile ¹¹ | 43.49 | 4.88 | 136.72 | 7.94 | 352.79 | 8.64 |
| Other Operative Costs.... | 35.68 | 4.00 | 70.19 | 4.07 | 244.13 | 5.98 |
| Total | \$ 140.40 | 15.74 | \$296.07 | 17.19 | \$755.58 | 18.50 |

An examination of the data reveals the fact that for household operating expenses the Virginia poor farm families spend \$140, or 15.74 per cent of their total living costs, the intermediate group \$296, or 17.19 per cent, while the corresponding figure for the prosperous group amounts to \$756, or 18.50 per cent.

The Kirkpatrick Study in other states shows a consistently lower proportion of the total living costs going for operation expenses. Under the classification adapted from his figures the lowest group spends 14.11 per cent, the intermediate group 13.34 per cent, and the prosperous group 12.5 per cent of their total costs on this account. The upward movement in the case of the Virginia farmers is likely attributable largely to the higher average costs on the item of automobile operation for family use. We may separate several of the principal

11. In computing the cost for the use of the automobile, it was estimated that at least 65 per cent of the total costs of operation including depreciation were assignable to family use on all pleasure cars, where the car was used also for the business of the farm. This, it was felt, is a conservative figure, since the judgments of many whose opinions were solicited, placed the family use at as much as 75 or 80 per cent.

items entering into the operating expenses with a view toward a better understanding of the relationships which obtain.

Of all the operating costs, fuel and light are most important in the poor families, where this accounts for 6.86 per cent of the total living expenditures; and least important, relatively, in the prosperous, where the percentage of total living costs is 3.88. Fuel and light costs account for 5.18 per cent of the living costs of the intermediate group. Most of the heating for the poor and intermediate groups is furnished by wood burned in stoves or open fire places. In none of the homes of poor families were modern heating devices found. In the intermediate group, only three of the 85 homes visited list any central heating arrangement, while in the prosperous families nearly half were equipped with some form of centralized heating.

In the poor and intermediate groups the type of lighting is still predominantly the oil lamp. Electricity or gas was found in only one home of the poor group; one-sixth of the intermediate group enjoyed electricity or gas, while one-fourth of the families in the prosperous homes were supplied with these conveniences. Considerable improvement in the matter of lighting should be expected among the farm population as the result of the continuing efforts of the exponents of farm electrification who have already formulated certain concrete plans for Virginia in this connection.

a. The Automobile as a Factor in Family Living

Forty-three per cent of the farm families of the lowest economic group studied in the Virginia survey operate automobiles, while 78 per cent of the farmers in the intermediate group and 100 per cent of those in the prosperous group are able to enjoy the satisfaction of this means of communication. The costs incident to the operation of the respective groups, applicable to the family use of the automobile are, for the average of the entire group, \$43 for the poor, \$137 for the intermediate and \$353 for the prosperous. These amounts represent 4.88 per cent of the total living costs of the poor, and 7.94 per cent and 8.64 per cent respectively, for the intermediate and prosperous groups.

Since only 43 per cent of the poor farmers and 78 per cent of those in the intermediate group operate automobiles, the costs given above do not indicate the costs per family of those possessing cars, the figures above shown being simply an average expenditure for the group as a whole. If we examine the figures on the basis of families which

operate cars we find that for the poor group the amount chargeable for family use averages \$102, for the intermediate group \$176, and for the prosperous group \$353. These figures cover an average of 65 per cent of all costs of operating the cars plus an allowance for depreciation.¹² On the basis of these figures, it is worth noting that the cost of operating the automobile for family use exceeds the costs of fuel and light for the three economic groups. While we should expect this to be the situation among the more prosperous farmers, we are surprised somewhat to find among the poor and intermediate groups costs for the maintenance and operation of automobiles ranging from two-thirds more than to twice as much as is spent for fuel and light.

There is good reason to maintain that for many families of the lower economic levels the operation of an automobile presents a two-fold disadvantage. On the one hand, the expenses incident to this item constitute a drain upon the total living fund which is disproportionate to the ability of the family to meet other living costs. On the other hand, it may be observed that far from constituting a necessary function of the farm efficiency, it serves as a deterrent to the consistent application of the energies of the farmer in the obligations which he may be said to owe to his social and economic status.

No criticism is advanced on the side of the positive value from a social viewpoint of the possession of automobiles as a means of affording good. The ability to get into new scenes and away from the monotony of routine occasionally and with dispatch argues convincingly for encouraging the use of automobiles in farm life. The point here to be made is that in the relationship between cost of the service and ability to pay there is a considerable difference among farm families, and that what appear to be indexes of higher living standards are in reality but evidences of misplaced emphasis insofar as the net benefits resulting from the operation of automobiles is concerned.

Where we observe that in only 5 per cent of the homes of poor farm families do we find running water, baths in none, modern lighting in less than 2 per cent, where no modern heating devices are found, yet where 40 per cent of the families operate automobiles, we may justly question the balance of real values in family living.

What has been said of the poor group respecting the use of automobiles applies in some measure to a considerable part of the inter-

12. The method employed in arriving at these estimates is described in the footnote to Table 13.

mediate group. The deleterious results from the viewpoint of efficiency in the operation of the farm in all too many instances outweigh the recreational and social benefits. And to the extent that this is found true we may account in just measure for a partial explanation of unprofitable farming.

b. Household Furnishings and Equipment

And if the contrasts above indicated are not sufficient to demonstrate an utter disproportion of expenditures among the lower expenditure group we need only observe the figures respecting outlays for household furnishing and equipment. Under this head appear such items as go to make up the furnishings of the household—furniture, linens, carpets, draperies, pictures, etc. Table 14 shows that the poor farm families in Virginia spend less than four dollars annually in this field, or less than one-half of one per cent of their entire living costs.

TABLE 14
EXPENDITURE OF FARM FAMILIES FOR HOUSEHOLD FURNISHING AND
EQUIPMENT IN VIRGINIA AND OTHER STATES

| Class | Virginia Farm Families | | Eleven Other States | |
|--------------------|------------------------|--------------------------------|---------------------|--------------------------------|
| | Amount | Per cent of total living costs | Amount | Per cent of total living costs |
| Poor | \$ 3.93 | 0.44 | \$ 17.76 | 1.90 |
| Intermediate | 25.34 | 1.47 | 44.61 | 2.60 |
| Prosperous | 78.33 | 1.92 | 109.58 | 2.90 |

The intermediate group spends 1.47 per cent of its total living fund on this item, while the prosperous families spend 1.92 per cent. These figures are consistently lower for the Virginia farm families than for those reported in the Kirkpatrick Study. In comparing these two studies, the widest differences are seen among the poor families. Observation of the living conditions of many of the poor families stands in support of the low figures shown for Virginia, and it is hardly conceivable that a difference so wide as that shown between the Virginia survey and that of the other states, could be explained as a simple margin of error. The explanation would seem to be that any considerable expenditure on account of the item of furniture and equipment is just not incurred.¹³

13. It should be stated in this connection that in the case of expenditures such as radio and equipment, the costs were included as items falling under the ad-

8. EXPENDITURES FOR PERSONAL ITEMS

Under the head of Personal Items we have to consider such details as gifts, jewelry, toilet articles, the barber, and incidental refreshments not falling into the class of food (for example, soft drinks, tobacco, etc.).

The total annual expenditure on this account for the average poor family is \$21.66, or 2.42 per cent of the entire living costs of the family. Of this sum, as much as \$8.75 or 40 per cent, goes for the item of gifts. This is less than one per cent of the total living cost. Kirkpatrick's Study indicates an expenditure of \$20.94, or 2.24 per cent of the total living costs, for similar economic groups.

TABLE 15
EXPENDITURES FOR PERSONAL ITEMS AMONG FARM FAMILIES

| Class | Gifts | Virginia | | Farm Families | | Eleven Other States | |
|-------------------|---------|--------------------------------------|----------------------------|--------------------------------------|----------------------------|--------------------------------------|--|
| | | Per cent of total living costs | Total personal items | Per cent of total living costs | Total personal items | Per cent of total living costs | |
| Poor | \$ 8.75 | 0.98 | \$ 21.66 | 2.42 | \$ 20.94 | 2.24 | |
| Intermediate..... | 38.69 | 2.25 | 53.21 | 3.09 | 41.52 | 2.42 | |
| Prosperous | 260.75 | 6.39 | 317.55 | 7.78 | 143.59 | 3.80 | |

Expenditures on these items for the intermediate group are somewhat over twice as great as for the poor, being \$53.21, or 3.09 per cent of the total family living costs. Again, the expenditure is slightly higher than for the corresponding group in the Kirkpatrick Study which shows an outlay of \$41.52, or 2.42 per cent of the budget. Gifts for this group in Virginia amount to \$38.69, or 2.25 per cent of the total living costs.

The prosperous family spends 7.78 per cent of its total living costs on personal items, of which 6.39 per cent goes for gifts alone. This is considerably more than twice as much as the expenditure of the corresponding economic group in the eleven states represented in Kirkpatrick's Study.

It is apparent that the order of progression in the economic groups here considered shows a fair correlation on account of expenditures for personal items. Both the poor and intermediate groups are mod-

vancement and recreation expenditures. To the extent that this same classification was not followed in the Kirkpatrick Study a part of the difference would undoubtedly be accounted for.

est in the matter of giving, while the prosperous who are better able to spend generously show greater proportional liberality.

At the risk of confusing the comparisons somewhat, it is thought desirable to consolidate all items which might be said to represent expenditures on account of benevolence in order to give a more informing picture of the situation as between the several economic groups. For this purpose, the expenditures on account of contributions to the church and charity have been removed for the moment from their place in "expenditures for advancement and recreation" (to be discussed later) and added to the item of gifts. Table 16 shows the results of this consolidation.

TABLE 16
EXPENDITURES FOR THE CHURCH, CHARITY AND GIFTS AMONG VIRGINIA
FARM FAMILIES

| Class | Amount | Per cent of total living costs |
|--------------------|----------|--------------------------------|
| Poor | \$ 17.90 | 2.01 |
| Intermediate | 67.96 | 3.95 |
| Prosperous | 385.29 | 9.44 |

Here we observe very clearly the more than proportional increase for benevolent purposes as we ascend the economic scale. It is to be noticed especially that the prosperous group spends nearly one-tenth of its total living costs for the church, charity and gifts. More specific attention will be given to the expenditures for the church and charity under the head of advancement and recreation.

9. HEALTH AND FARM LIVING COSTS

The condition of the health of farm families is not measurable by the amount of money spent for doctors and medicines. The economic status of the family is a conditioning factor in this regard, for if the family is poor, it will ordinarily defer the employment of a physician longer than families in better financial circumstances. Moreover, the charges for medical services are fairly generally laid in some rough accordance with ability to pay, and if they are not, the likelihood is that they cannot be paid either promptly or in full. Hence, we may not claim in any sense that the costs of health as shown in this study are an index to the health status of the respective economic groups.

It has not been proved that the children of poor families are less

healthy than those of higher economic status. Susceptibility to the ailments of childhood, and for that matter, in a marked degree to those of adulthood, does not always follow economic lines. Unfortunately, morbidity statistics have not been refined to give us the relationship existence between different economic groups. We do, however, know definitely that infant mortality is higher among poor families. And this brings us to the point which was suggested in the preceding paragraph, namely, that belated or insufficient medical attention and treatment were in all probability responsible for an apparently greater amount of sickness among poor families. The economic deterrent operates to the disadvantage of the health in the case of poor families.

We may mention also the factor of preventative medicine as tending to operate in favor of a reduction of morbidity among the families comprising the higher economic groups. This would be potent in view of the fact that in the matter of sanitation and cleanliness we are likely to find conditions better on the whole in the upper economic levels. A higher degree of intelligence and information in matters of health and the prevention of disease would normally be found as we ascend the economic scale.

Despite the fact that data respecting costs of health among the families of the several groups in this study may not serve as an index to the condition of their health, it is nevertheless significant to observe the relationship which exists between health costs and the total family living costs.

TABLE 17
COSTS OF HEALTH FOR FARM FAMILIES

| Class | Virginia Study | | Eleven Other States | |
|--------------------|----------------|--|---------------------|--|
| | Amount | Percentage of total living costs | Amount | Percentage of total living costs |
| Poor | \$ 23.09 | 2.59 | \$ 26.36 | 2.82 |
| Intermediate | 59.08 | 3.43 | 63.31 | 3.69 |
| Prosperous | 110.42 | 2.70 | 181.37 | 4.80 |

Families of the poor group in Virginia spend \$23 annually for doctors and dentists, and for medicine. This is equal to 2.59 per cent of all their living costs. The intermediate group spends more than twice as much in dollars, but on the basis of percentage of total budget,

only 32 per cent more. Prosperous families average \$110, nearly twice that of the intermediate group, and a lower percentage of the total living costs for the group. The percentage that health costs constitute of the total budget is but slightly higher for the prosperous than for the poor families, while the absolute dollar costs are nearly four-fold greater.

There is a close relationship between the costs of health shown for the Virginia farm families and for those of the Kirkpatrick Study in both the poor and intermediate groups. A slight difference exists in favor of higher costs for the families of the eleven states comprising this study. With the prosperous group, however, the costs are appreciably higher outside the State by nearly 65 per cent in dollars, and by 77 per cent in the relationship between health costs and total living costs.

Admitting the correctness of the idea that medical charges tend to be more moderate in the case of poor families, it would nevertheless appear that the health expenditures are all too low among poor families in view of their minimum needs. It is not unlikely that these low costs are reflected in the conditions of teeth, tonsils, adenoids, etc., with all their accompanying ailments.

Doubtless the extension of county health units throughout the state will operate to ameliorate the differences in economic ability among farm families making up the community insofar as morbid tendencies exist. Encouragement of this form of community activity is to be hoped for to the end that the conditions of health may not work to the detriment of families whose economic status precludes even a minimum of medical needs. The argument for such agencies is almost equally valid for the upper groups, also, since the principles of preventive medicine must apply to society in the less fortunate groups if their communicable diseases are not to be conveyed to all of the groups.

10. LIFE AND HEALTH INSURANCE

Average expenditures for insurance serve, in some measure, as an index of the thrift of families. In like measure, they indicate the extent to which thought is taken of the future and provision made against it. Keeping in mind always the fact that the extent of insurance holdings is conditioned upon the economic status of the individual, we may with profit examine the findings in this connection among farm families in Virginia together with such comparisons as are available for other sections.

TABLE 18
AVERAGE EXPENDITURE FOR INSURANCE AMONG FARM FAMILIES

| Class | Virginia Farm Families Amount | Percentage of total living costs | Eleven Other States Amount | Percentage of total living costs |
|--------------------|----------------------------------|--|-------------------------------|--|
| Poor | \$ 3.11 | 0.35 | \$ 13.18 | 1.41 |
| Intermediate | 25.16 | 1.46 | 41.18 | 2.40 |
| Prosperous | 182.08 | 4.46 | 170.04 | 4.5 |

Less than one-half of one per cent of the total family living costs of the average poor farmer in Virginia is expended for insurance—but slightly more than three dollars. Families of the same economic status in other states average an expenditure of over \$13.18, or 1.41 per cent of the living costs.

Among the intermediate and prosperous families, the average costs are substantially higher than for poor families. The intermediate group averages \$25.16 annually for this item, or 1.46 per cent of its living costs, while the prosperous group reaches \$182.08 or 4.46 per cent. The expenditures of the intermediate group for insurance are, however, considerably under those for the corresponding group in other states where the average is \$41.18, or 2.40 per cent of living costs. Between the prosperous families in the State and outside Virginia, there is but little difference in insurance expenditure.

Partial explanation of the low figure for Virginia farmers lies in the fact that so few of them invest in insurance. The figures shown in Table 18 representing averages for an entire group, include families who hold no insurance. A more accurate picture of the extent of insurance investment is given in the following table (see Table 19).

TABLE 19
EXTENT OF INVESTMENT IN INSURANCE BY VIRGINIA FARM FAMILIES

| Class | Per cent of families owning insurance | Average annual premium |
|--------------------|--|------------------------------|
| Poor | 10.0 | \$ 31.10 |
| Intermediate | 38.7 | 64.80 |
| Prosperous | 75.0 | 242.77 |

Ten per cent of the families of the Virginia poor group hold insurance, and these pay an average net annual premium of \$31.10;

while 38.7 per cent of the intermediate, and 75 per cent of the prosperous group are insured and make net annual premium payments of \$64.80 and \$242.77, respectively.

For those families who hold insurance, it may be fairly stated that they are reasonably protected in each group for contingencies arising by reason of death of the head of the household, at least to an extent sufficient to tide them over a period of emergency. Considering each entire group, including those who are without insurance, it is apparent that among the poorer families there is altogether inadequate provision against such contingencies. And what is apparent also is that very little provision in the form of other saving than insurance will be found among the families of low economic status. Farmers in the two lower groups outside Virginia are obviously more adequately protected than Virginia farmers, insofar as the data herein presented are sufficient to be held representative.

11. ADVANCEMENT AND RECREATIONAL COSTS

Cultural and social relationships stand forth as the final criteria of the living standard of families. By and large those families are enjoying more wholesome living, both from an individual as well as a community viewpoint, whose cultural and social contacts are more strongly evidenced than are those of their neighbors. The standard of living, however, is a relative matter, and we can speak of the degree of attainment of a given standard only in terms of comparative values. Since we have no means of showing by statistical measurement the psychic and physical satisfactions through studies of the human individual, we must look perforce to whatever other indices suggest themselves as an approximate measure of these satisfactions even if less accurate than the ideal.¹⁴

We are given a partial measure of the extent to which families are subjected to cultural and social contacts through the expenditures which they make on account of advancement and recreational activities. What the family spends for reading matter may indeed not indicate the extent of its reading, yet it is nevertheless true that when an entire group of families is considered and averaged, the inference may justly be made that reading matter—books, magazines and papers—is not brought into the home so much for decorative purposes

14. It is true also that a study of individuals with respect to their psychical and physical responses would fall short, from the group standpoint, of giving us a measurement of the social wholesomeness of activities and relationships in which they might engage.

as for securing information and entertainment. In similar manner we may infer like benefits, though of varying degree, from expenditures for tuition, music lessons, church and organization membership dues, lecture courses, the theatre, the church and charity, fairs, shows, special recreational or vacation trips, and similar things.

Thus considered, the recreational and advancement activities of farmers in Virginia show a wide variation between the several economic groups.

TABLE 20

EXPENDITURES FOR ADVANCEMENT AND RECREATION AMONG FARM FAMILIES

| Distribution by class | Virginia Farm Families | | | Eleven Other States | |
|--------------------------|------------------------|---|--------------------------------------|---------------------|--------------------------------------|
| | Amount | Per cent of total advance- ment and recre- ational costs | Per cent of total living costs | Amount | Per cent of total living costs |
| Poor: | | | | | |
| Within home..... | \$ 5.60 | 27.6 | 0.63 | ..... | ..... |
| Outside home.... | 14.70 | 72.4 | 1.65 | ..... | ..... |
| Total | 20.30 | 100.0 | 2.28 | \$ 30.10 | 3.22 |
| Intermediate: | | | | | |
| Within home..... | 25.63 | 31.5 | 1.49 | ..... | ..... |
| Outside home.... | 55.78 | 68.5 | 3.24 | ..... | ..... |
| Total | 81.41 | 100.0 | 4.73 | 99.00 | 5.77 |
| Prosperous: | | | | | |
| Within home..... | 62.63 | 21.0 | 1.53 | ..... | ..... |
| Outside home.... | 235.16 | 79.0 | 5.76 | ..... | ..... |
| Total | 297.79 | 100.0 | 7.29 | 506.33 | 13.40 |

Poor families spend an average of \$20.30 per year for advancement and recreation goods or services, while the intermediate group spends \$81.41, and the prosperous, \$297.79. The relationship of these expenditures to the total living costs of the three groups is 2.28 per cent for the poor, 4.73 per cent for the intermediate, and 7.29 per cent for the prosperous.

It is apparent that the satisfactions of poor families through this field of expenditure are few in comparison with the higher expenditure groups. They are even less than for the corresponding group in other states, where 3.22 per cent of the total living costs comprise expenditures for recreation and advancement, as shown by the Kirkpatrick Study. Consistently, for the intermediate and prosperous

groups, the Virginia farmer incurred less expenses for recreation and advancement than did those farmers in other states.

These figures indicate unmistakably the tendency of higher standards of living to find expression in more liberal spending for cultural wants. The existence of higher expenditures for this form of wants is at the same time a cause and a result of a higher plane of life. Higher expenditures represent a cause to the extent that we recognize the social importance of the items which are embraced in the classification of cultural wants. They represent an effect in the sense that individuals whose intellectual horizons have been widened need to be entertained and instructed in a manner commensurate with their capacities. A more complete perspective of the cultural and recreational phases of the life of the several groups is afforded in the succeeding section of this study, which in logical sequence cannot be included at this point.

CHAPTER III

Social and Environmental Factors

1. GENERAL STATEMENT

PURSUING the thought expressed in the concluding statements of the preceding chapter, we might with interest and profit inquire into the educational aspects of farm families in an endeavor to ascertain the relationships, if any, between prevailing standards of living in different groups and the educational attainments found therein.

A just appreciation of such relationships, however, is contingent upon a knowledge of other factors, such as the age of parents and children, the age of the family, time of marriage, etc., as well as some general understanding of educational opportunities at different periods. In the next succeeding paragraphs, the effort will be made to interpret certain of the data which were yielded by the study of 137 Virginia farm families.

2. NUMBER OF CHILDREN IN FARM FAMILIES OF DIFFERENT GROUPS

It was noted in the introductory chapters that the average number of children in the poor families exceeded those in the intermediate and prosperous groups. We may turn again for the moment to a fresh examination of the data with a view toward explaining this apparent contradiction of the popular belief that poor families are large families.

TABLE 21
NUMBER OF CHILDREN IN VIRGINIA FARM FAMILIES

| Class | Average number living | Children living at home | Children living away from home |
|--------------------|--------------------------|----------------------------|-----------------------------------|
| Poor | 3.6 | 2.1 | 1.5 |
| Intermediate | 4.3 | 2.4 | 1.9 |
| Prosperous | 4.2 | 2.5 | 1.7 |

It appears in Table 21 that poor families average 3.6 children now living, whereas the intermediate and prosperous groups show 4.3 and 4.2, respectively. Now, it is commonly believed that poverty is characterized by a larger average size of family than that occurring in

higher levels of living. Are the figures here shown a refutation of this common belief, or are they merely the result of an insufficient sample of each group?

To the first question the authors would reply that the average number of children as demonstrated through the random selection of families of different levels of living affords no basis for the claim that families in any of the groups tend to have more or less children than in the others. This is so because of the fact that the family age and cycle differs among the groups. Among poor groups we are likely to find many young couples whose family growth is incomplete. The result of an inclusion of those families in any sample would be to reduce the average number of children for that group.

That this factor is operative in the present sample of families of the several groups appears in the finding that among the poor families 42.5 per cent had been married 15 years or less. Among the intermediate group of families, 28.3 per cent had been married 15 years or less, while only 25 per cent of the prosperous group had a family age of less than 15 years. Considering families of an age less than ten years with respect to the total number of families studied, we find for the poor group 27.5, for the intermediate 12.9, and for the prosperous 16.6.

There is another factor which operates to reduce the average number of children in the poorer groups, a factor upon which it is difficult to get accurate data and which is therefore deficient in the present study. The infant mortality rate is generally higher among families of inferior economic status. A larger number of the children born into families of more adequate financial means survive and attain maturity. Hence, we should expect to find a higher percentage of total children born who are now living among the average family of the intermediate or prosperous group than among poor families.

A third factor operating to show a higher average number of children among the families of greater financial strength is the tendency of many families which in immaturity are among the poor group to emerge and arrive at higher levels as the family cycle progresses. Older children in many families supplement the family income and become assets rather than liabilities. This would be quite as true of farm families as of city families. The labor value of children is even more quickly realized among farm children than elsewhere since at an earlier age they may render valuable service to the farm operations.

It seems fairly certain then that families of the poor group which

were selected for this study contain a larger number of younger families than do the intermediate and prosperous groups. The average number of children per family in the poor group therefore tends to be smaller than for the other groups. This tendency is demonstrated also in studies of more extensive scope which have appeared to date.¹

Further light is shed on this problem if we examine the marriage periods of the families in the poor and intermediate groups to find the number of children born over a similar number of years in each group.

TABLE 22

COMPARISON OF NUMBER OF YEARS BETWEEN BIRTHS OF CHILDREN IN VIRGINIA FARM FAMILIES OF DIFFERENT AGES*

| Class | Age of family | Children born on average of years |
|-------------------|------------------------|-----------------------------------|
| Poor..... | 10 years or less..... | 3.35 |
| | 11 to 15 years..... | 3.58 |
| | 15 years and less..... | 3.46 |
| Intermediate..... | 10 years or less..... | 3.95 |
| | 11 to 15 years..... | 4.26 |
| | 15 years and less..... | 4.16 |

*The data in hand were insufficient to make a fair analysis of the situation in the prosperous group of families in this connection.

Table 22 shows that in poor families of a marital age of ten years or less, a child is born on an average of 3.3 years, while in the intermediate group the interval is somewhat longer. This same relationship obtains for families in the 11 to 15 year marital age period.

In view of these several factors it may not be maintained that an extraordinary situation respecting comparative family size is developed in the present study. The findings herein shown are in conformity with those of the Bureau of Labor and the Department of Agriculture which have been projected on a much larger scale. However, the situation presented would seem to indicate here a significant problem calling for further specific investigation. It may be that such a study would seriously affect the validity of present impressions as to size of family in the several levels of society.

3. EDUCATIONAL ATTAINMENT IN FARM FAMILIES

Education in its truest sense consists more in an appreciation of the finer things of life and the power to effectively express such apprecia-

1. Kirkpatrick, E. L.: *Study of Farm Families in Eleven States*; also, Bureau of Labor Statistics, Bulletin 357: *Cost of Living in the United States*.

tion, than simply in factual knowledge gleaned from books and formal teaching. Still, it may be that ability to appreciate depends largely upon the capacity for appreciation, which, in turn, is developed through schooling. Education is not an inheritance, it is an acquisition. In a social sense those individuals are most useful to the group who have learned minds, be their knowledge gathered at the hands of competent instructors or acquired by dint of sheer independence of inquiry through observation and experience.

Education does not end for each individual with the limits of formal schooling. The classroom does indeed, however, mark in a large measure the breadth of capacity for groups of individuals. Hence, in a study of living standards, it is appropriate that examination be made of the educational attainment of families comprising different economic levels to determine what relationships exist.

TABLE 23
AVERAGE NUMBER OF YEARS OF FORMAL SCHOOLING FOR PARENTS AND
CHILDREN IN VIRGINIA FARM FAMILIES

| | Poor | Intermediate | Prosperous |
|-----------------------------|------|--------------|------------|
| Husband | 5.0 | 6.3 | 8.7 |
| Wife | 5.9 | 6.9 | 8.5 |
| Children ² | 7.3 | 8.9 | 12.0 |

The farm husband of the poor group as reported received only five years of formal schooling on an average, while the wife received nearly one year more. Children in these families average 7.3 years. This means that for the families studied, an average of three-tenths of one year's schooling beyond the elementary school was enjoyed by the children of poor farmers. Many of the children do not, of course, complete the grades; there are others, however, who get into high school, and a few who get into business school or college. It is significant to note that children of this group today have but slightly less than 50 per cent more years in school than their fathers had.

Among families of the intermediate group, the father averages 6.3 years of formal schooling, his wife 6.9 years, and the children 8.9 years. Consistently, these figures are higher than for the poor group, which

2. Children herein considered are 15 years of age and over. It appears that of these children, 4.7 per cent of the poor group, 11.3 per cent of the intermediate group, and 7.1 per cent of the prosperous group are now attending school.

is what we might expect to observe. And here again the children enjoy nearly 50 per cent more years in school than their fathers.

Fathers in prosperous families have had an average schooling of 8.7 years, or the equivalent under present day grading of near completion of the second-year of high school. Wives in these families receive slightly less schooling, whereas in the poor and intermediate groups they enjoyed somewhat more than their husbands. Children in this group average 12 years, or the equivalent of one year in college after completing their high school training.

While the children in all groups are averaging more years in school than their parents, it is a fact worthy of note that the added years approximate a proportional sameness for each group; that is, the children in the three groups are getting each approximately from one-third to one-half more schooling than either of their parents received.

TABLE 24
EDUCATION—FORMAL, EDUCATIONAL ATTAINMENT OF FARM PARENTS

| | Poor | | | Intermediate | | | Prosperous | | |
|--------------------------------|--------|--------|-------|--------------|--------|------|------------|--------|-------|
| | Father | Mother | Both | Father | Mother | Both | Father | Mother | Both |
| No schooling | 4 | .... | 4 | 4 | .... | 4 | .... | .... | .... |
| Elementary | | | | | | | | | |
| 1 to 4 years..... | 15 | 9 | 24 | 9 | 4 | 13 | 1 | .... | 1 |
| 5 to 7 years..... | 15 | 19 | 34 | 53 | 52 | 105 | 6 | 7 | 13 |
| High school | | | | | | | | | |
| Part way | 2 | 3 | 5 | 7 | 5 | 12 | .... | 1 | 1 |
| Complete ..... | .... | 2 | 2 | 4 | 5 | 9 | .... | .... | .... |
| College | | | | | | | | | |
| Part way ..... | .... | .... | .... | 2 | 6 | 8 | 3 | 3 | 6 |
| Complete ..... | .... | .... | .... | 2 | 1 | 3 | 1 | .... | 1 |
| Not classified | 4 | 7 | 11 | 4 | 12 | 16 | 1 | 1 | 2 |
| Total..... | 40 | 40 | 80 | 85 | 85 | 170 | 12 | 12 | 24 |
| <i>Percentage Distribution</i> | | | | | | | | | |
| No schooling | 10.0 | ..... | 5.0 | 4.7 | ..... | 2.4 | ..... | ..... | ..... |
| Elementary | | | | | | | | | |
| 1 to 4 years..... | 37.5 | 22.5 | 30.0 | 10.6 | 4.7 | 7.6 | 8.3 | ..... | 4.2 |
| 5 to 7 years..... | 37.5 | 47.5 | 42.5 | 62.3 | 61.2 | 61.7 | 50.0 | 58.3 | 54.1 |
| High school | | | | | | | | | |
| Part way | 5.0 | 7.5 | 6.3 | 8.2 | 5.9 | 7.1 | ..... | 8.3 | 4.2 |
| Complete ..... | ..... | 5.0 | 2.5 | 4.7 | 5.9 | 5.3 | ..... | ..... | ..... |
| College | | | | | | | | | |
| Part way ..... | ..... | ..... | ..... | 2.4 | 7.1 | 4.7 | 25.0 | 25.0 | 25.0 |
| Complete ..... | ..... | ..... | ..... | 2.4 | 1.1 | 1.8 | 8.3 | ..... | 4.2 |
| Not classified | 10.0 | 17.5 | 13.7 | 4.7 | 14.1 | 9.4 | 8.3 | 8.3 | 8.3 |
| Total..... | 100 | 100 | 100 | 100 | 100 | 100 | 99.9 | 99.9 | 100 |

It is well known that the quality of training has undergone a marked improvement in the interval between the time of the education of most of the farm parents and that which marks the period of training for their children. Among other things, the school year is longer, teaching facilities have been increased, and the grade of training is certainly more extensive than formerly.

Table 24 presents in more detail the years of schooling received by parents in the farm families studied. Ten per cent of the fathers in the poor group, and 4.7 per cent in the intermediate group reported no formal schooling. The mothers in all groups seem to have received some, however slight. Only five per cent of the fathers in the poor families got beyond the grade or country school, while 17.7 per cent of those in the intermediate and 33.3 per cent of those comprising the prosperous group entered high school. Mothers in the poor and intermediate groups went beyond the grammar school in larger numbers than their husbands. For the prosperous group the percentage for fathers and mothers was identical. While none of the parents in poor families entered college, a few in the intermediate group, and a somewhat greater number in the prosperous group were thus favored.

Any consideration of the educational attainment of the children in farm families must first take into account the fact that in many instances the children are still in attendance at school. It is well, therefore, to eliminate as large a percentage as possible of those who are still in the process of acquiring formal education, and with this in

TABLE 25

PERCENTAGE DISTRIBUTION OF CHILDREN IN VIRGINIA FARM FAMILIES FIFTEEN YEARS OF AGE AND OVER ON BASIS OF EDUCATION

| | Poor | | Intermediate | | Prosperous | |
|---------------------------------------|----------|---------------------|--------------|---------------------|------------|---------------------|
| | Per cent | Cumulative per cent | Per cent | Cumulative per cent | Per cent | Cumulative per cent |
| Now in school | 7.1 | ..... | 11.2 | ..... | 7.2 | ..... |
| Schooling completed | 92.9 | ..... | 88.8 | ..... | 92.8 | ..... |
| Children Whose Schooling Is Completed | | | | | | |
| College (graduated) | 1.3 | 1.3 | 4.7 | 4.7 | 28.2 | 28.2 |
| College (not graduated)..... | 3.8 | 5.1 | 12.7 | 17.4 | 30.8 | 59.0 |
| High School (graduated)..... | 15.1 | 20.2 | 16.9 | 34.3 | 15.4 | 74.4 |
| High School (not graduated).... | 12.7 | 32.9 | 22.5 | 56.8 | 25.6 | 100.0 |
| Grammar School (graduated)..... | 32.9 | 65.8 | 30.1 | 86.9 | ..... | ..... |
| Grammar School (not graduated) | 34.2 | 100.0 | 13.1 | 100.0 | ..... | ..... |
| | 100.0 | ..... | 100.0 | ..... | 100.0 | ..... |

mind, Table 25 has been drawn, including only those children 15 years of age and over. Many of these children are no longer at home; many of them have married and are raising families of their own; but these facts are not conditional to the validity of the tabulation.

In the farm families studied it seems that the formal education of children 15 years of age and over bears a fair correlation to the living standards of each group. In the poor group, 7.1 per cent of the children 15 years of age and over are still in school, while 11.2 per cent of the intermediate and 7.2 per cent of the prosperous group are still in attendance. In the figures pertaining to those children whose formal schooling is completed, we find some very remarkable relationships (see Table 25).

Graduates from college are negligible in the poor group where they constitute but slightly more than one per cent, somewhat more numerous in the intermediate group—nearly five per cent—and very high in the prosperous, where slightly more than 28 per cent are graduates. Apparently, considerably more of the children of prosperous families who enter college are successful in completing the requirements for graduation. This is shown by a comparison of the figures for college graduates and those who have attended college but not graduated. Differences in economic ability of the families will explain to some extent this feature since the expenses of a higher education are prohibitory in many of the families of the intermediate group and still more so among the poor families. It is likely that training beyond high school for the children of most poor families is acquired only through sheer will on the part of the individuals seeking it, and often under environmental conditions which are severely discouraging.

Here is involved a question which has been the subject of no little discussion recently on the part of educators—what sacrifice is justified in the attainment of higher education? The question is pertinent to any discussion of living standards. It presents a problem whose field of interest is broader than the bounds of individual family budgets, and which from a social viewpoint merits a consideration by the best minds in the educational world.

In the intermediate group, which constitutes the bulk of the population, we find 86.9 per cent of the children graduating from grammar school and 34.3 per cent from high school, while in the poor group only 65.8 per cent graduate from grammar school and but 20.2 per cent from high school. It is worth observing that of those children

who have entered high school at all, 64.4 per cent of the poor group graduate while 60.4 per cent of the intermediate and 74.4 per cent of the prosperous are successful in this accomplishment. This argues well for the persevering qualities of those children among poor families who are favored with the possibility of entering high schools. The numbers who enter are altogether too few, however; only 32.9 per cent as against 56.8 per cent for the intermediate group, and 100 per cent for the prosperous group.

4. OCCUPATIONAL STATUS OF CHILDREN OF FARM FAMILIES

From the preceding section dealing with the educational attainment of children in farm families of the several economic groups, we may proceed in logical transition to an examination of the occupational aspects of those same children with a view toward determining just what differences are to be found in the employments in which they ultimately engage. Having observed that the average number of years of formal schooling varied substantially for the three groups—being as we should have expected, lowest for the poor and highest for the prosperous—our next offhand judgment, in the absence of statistical data, would be that the division of occupational employment should reveal a similar gradation; namely, that we should find more of the children of farm families of the poor group engaged in lower occupational grades, such as unskilled and semi-skilled workers, and fewer of them in the upper grades, such as skilled and business and professional employments, where the needs of the work demanded more training and perhaps native ability.

Our supposition is borne out in the analysis of the data available in this connection. The three tables which follow are in large measure self-explanatory, and while there is little need to set down in the text detailed statements of interpretation, we may profitably observe a few of the more striking facts which appear in them.³

The accompanying tables consider only those children fifteen years of age and over. While there are a few children of the poor group and still more of the intermediate group whose formal schooling is incomplete at this age, no essential difficulty arises by reason of the fact that these are included in the rather arbitrary selection of this

3. It must be kept in mind that the limited sample of families in the poor and prosperous groups present a certain inconclusiveness in the findings. The fact that the results seem to accord with accepted judgments may in some instances, however, be taken as a just evidence of adequacy.

TABLE 26
OCCUPATIONAL STATUS OF CHILDREN OF FARM FAMILIES, FIFTEEN YEARS OF
AGE AND OVER, LIVING AT HOME

| | Poor | | | Intermediate | | | Prosperous | | | | | |
|--|-------|-------------|-------|----------------------------------|-------|-------------|------------|----------------------------------|-------|-------------|-------|----------------------------------|
| | Male | Fe- male | Total | Average years in school | Male | Fe- male | Total | Average years in school | Male | Fe- male | Total | Average years in school |
| Now attending school..... | 2 | 2 | 4 | 4.8 | 17 | 7 | 24 | 8.2 | ... | 1 | 1 | 9.0 |
| Farm: operator or homemaker..... | 8 | 8 | 16 | 6.6 | 33 | 28 | 61 | 8.1 | 6 | 9 | 15 | 10.7 |
| Other than farming or attending school | ... | ... | ... | .... | 1 | 7 | 8 | 10.9 | ... | 5 | 5 | 14.2 |
| Total..... | 10 | 10 | 20 | 6.8 | 51 | 42 | 93 | 8.4 | 6 | 15 | 21 | 11.3 |
| <i>Percentage Distribution</i> | | | | | | | | | | | | |
| Now attending school..... | 20.0 | 20.0 | 20.0 | ..... | 33.3 | 16.7 | 25.8 | ..... | ..... | 6.7 | 23.8 | ..... |
| Farm: operator or homemaker..... | 80.0 | 80.0 | 80.0 | ..... | 64.7 | 66.6 | 65.6 | ..... | 100 | 60.0 | 71.4 | ..... |
| Other than farming or attending school | ..... | ..... | ..... | ..... | 2.0 | 16.7 | 8.6 | ..... | ..... | 33.3 | 4.8 | ..... |
| Total..... | 100 | 100 | 100 | ..... | 100 | 100 | 100 | ..... | 100 | 100 | 100 | ..... |
| Average age..... | ..... | ..... | ..... | 22.9 | ..... | ..... | ..... | 23.11 | ..... | ..... | ..... | 28.8 |

TABLE 27
OCCUPATIONAL STATUS OF CHILDREN OF FARM FAMILIES, FIFTEEN YEARS OF
AGE AND OVER, NOT LIVING AT HOME

| | Poor | | | Intermediate | | | Prosperous | | |
|----------------------------------|-------------------------|------|-------|-------------------------|------|-------|-------------------------|------|-------|
| | Average years in school | | Total | Average years in school | | Total | Average years in school | | Total |
| Male | Female | Male | | Female | Male | | Female | | |
| Now attending school..... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Unskilled | 8 | 1 | 9 | 6.3 | 7 | ... | 7 | 5.9 | ... |
| Semi-skilled | 8 | 4 | 12 | 7.2 | 20 | 2 | 22 | 7.5 | 1 |
| Skilled | 11 | ... | 11 | 7.6 | 17 | ... | 17 | 8.5 | 1 |
| Business and professional..... | 3 | 4 | 7 | 10.0 | 24 | 14 | 38 | 11.2 | 7 |
| Farm: operator or homemaker..... | 6 | 9 | 15 | 6.9 | 13 | 20 | 33 | 8.4 | 1 |
| Homemaker (not on farm)..... | ... | 11 | 11 | 8.5 | ... | 27 | 27 | 9.9 | ... |
| Total..... | 36 | 29 | 65 | 7.5 | 81 | 66 | 147 | 9.2 | 11 |
| Percentage Distribution | | | | | | | | | |
| Now attending school..... | ... | ... | ... | ... | ... | 4.6 | 2.0 | ... | 9.1 |
| Unskilled | 22.2 | 3.4 | 13.8 | ... | 8.6 | ... | 4.8 | ... | 10.0 |
| Semi-skilled | 22.2 | 13.8 | 18.5 | ... | 24.7 | 3.0 | 15.0 | ... | 9.5 |
| Skilled | 30.6 | 16.9 | 16.9 | ... | 21.0 | ... | 11.6 | ... | ... |
| Business and professional | 8.3 | 13.8 | 10.8 | ... | 29.6 | 21.2 | 25.8 | ... | ... |
| Farm: operator or homemaker..... | 16.7 | 31.0 | 23.1 | ... | 16.1 | 30.3 | 22.4 | ... | ... |
| Homemaker (not on farm)..... | ... | 38.0 | 16.9 | ... | ... | 40.9 | 18.4 | ... | ... |
| Total..... | 100 | 100 | 100 | ... | 100 | 100 | 100 | ... | ... |
| Average age..... | ... | ... | ... | 31.0 | ... | ... | ... | 29.2 | ... |
| | | | | | | | | | 31.0 |

TABLE 28
OCCUPATIONAL STATUS OF ALL CHILDREN OF FARM FAMILIES FIFTEEN
YEARS OF AGE AND OVER

| | Poor | | | Average years in school | Intermediate | | | Average years in school | Prosperous | | | Average years in school |
|----------------------------------|-------|--------|-------|----------------------------------|--------------|--------|-------|----------------------------------|------------|--------|-------|----------------------------------|
| | Male | Female | Total | | Male | Female | Total | | Male | Female | Total | |
| Now attending school..... | 2 | 2 | 4 | 4.8 | 17 | 10 | 27 | 8.6 | 1 | 2 | 3 | 11.7 |
| Unskilled | 8 | 1 | 9 | 6.3 | 7 | ..... | 7 | 5.9 | ..... | ..... | ..... | ..... |
| Semi-skilled | 8 | 4 | 12 | 7.2 | 20 | 4 | 24 | 7.4 | 1 | ..... | 1 | 8.0 |
| Skilled | 11 | ..... | 11 | 7.6 | 17 | ..... | 17 | 8.2 | 1 | ..... | 1 | 8.0 |
| Business and professional | 3 | 4 | 7 | 10.0 | 25 | 19 | 44 | 11.2 | 7 | 10 | 17 | 13.5 |
| Farm: operator or homemaker..... | 14 | 17 | 31 | 6.7 | 46 | 41 | 87 | 8.3 | 7 | 9 | 16 | 11.5 |
| Homemaker (not on farm)..... | ..... | 11 | 11 | 8.4 | ..... | 34 | 34 | 10.0 | ..... | 4 | 4 | 14.3 |
| Total..... | 46 | 39 | 85 | 7.2 | 132 | 108 | 240 | 9.0 | 17 | 25 | 42 | 12.4 |
| <i>Percentage Distribution</i> | | | | | | | | | | | | |
| Now attending school..... | 4.4 | 5.1 | 4.7 | ..... | 12.9 | 9.3 | 11.3 | ..... | 5.9 | 8.0 | 7.1 | ..... |
| Unskilled | 17.4 | 2.5 | 10.6 | ..... | 5.3 | ..... | 2.9 | ..... | ..... | ..... | ..... | ..... |
| Semi-skilled | 17.4 | 10.3 | 14.1 | ..... | 15.2 | 3.7 | 10.0 | ..... | 5.9 | ..... | 2.4 | ..... |
| Skilled | 23.9 | ..... | 12.9 | ..... | 12.9 | ..... | 7.1 | ..... | 5.9 | ..... | 2.4 | ..... |
| Business and professional | 6.5 | 10.3 | 8.2 | ..... | 18.9 | 17.6 | 18.3 | ..... | 41.2 | 40.0 | 40.5 | ..... |
| Farm: operator or homemaker..... | 30.4 | 43.6 | 36.6 | ..... | 34.8 | 37.9 | 36.2 | ..... | 41.1 | 36.0 | 38.1 | ..... |
| Homemaker (not on farm)..... | ..... | 28.2 | 12.9 | ..... | ..... | 31.5 | 14.2 | ..... | ..... | 16.0 | 9.5 | ..... |
| Total..... | 100 | 100 | 100 | ..... | 100 | 100 | 100 | ..... | 100 | 100 | 100 | ..... |
| Average age..... | ..... | ..... | ..... | 29.4 | ..... | ..... | ..... | 26.8 | ..... | ..... | ..... | 29.8 |

lower age limit. For many of the children of farm families, formal schooling is over before the age of fifteen years is reached.⁴

The dispersal of farm children operates most extensively among the poor families where more than three-fourths of those fifteen years of age and over are reported as "away from home." Six-tenths of those in the intermediate group, and one-half of those in the prosperous group within this age classification are away from home.

In all the groups the children who are at home engage most largely in farming. These average less years of schooling than those who are away from home.

The tendency for the children of the poorer group to find employment primarily in unskilled or semi-skilled occupations is clearly evidenced in the analysis of those children who are away from home. Among the several occupational types in this analysis it appears that schooling averages less as we descend the scale of economic grouping from prosperous to poor.

Homemakers who were not located on farms averaged more years of schooling in the poor and intermediate groups than those whose husbands were farming.

It is believed that the three preceding tables tell a story of environmental limitation. Perhaps the findings may be held inconclusive in view of the paucity of the sample. Despite this fact, however, a question is raised respecting the obligation of the community to set higher minimum educational requirements in the event that a more extensive study should reveal the validity of the results of the smaller sample. While it cannot be maintained that the community owes unlimited free educational possibilities to all children, it is nevertheless true that a more careful study needs to be made to ascertain whether the present provisions with respect to educational opportunities are adequate from a social viewpoint.

5. ENVIRONMENTAL FACTORS IN FARM LIVING STANDARDS

As has been suggested earlier in this study, much that bears directly upon living standards may be deduced from simple observa-

4. The Virginia compulsory school attendance law says: "Every parent, guardian or other person in the State of Virginia, having control or charge of any child or children who have reached the eighth birthday and have not passed the sixteenth, shall send such child or children to a public school or to a private, denominational or parochial school, or have such child or children taught by a tutor or teacher in a home, and such child or children shall attend school regularly during the period of each year the public schools are in session and for the same number of days as in public schools."

tion of the farmstead and its surroundings. Not infrequently immediate classification may be made of the economic and social status of the family without the need for a detailed questioning of any of its members. Certain characteristic features of different economic and social groups come to serve as fair criteria for arbitrary classifications. The appearance of the farm house on approach, its need for paint or repairs, the condition of the yard adjacent to it, its orderliness or lack of orderliness, reveal in large measure the type of its occupants and their status. The instances in which these criteria are not found to be indicative of true status and relationship are too few to vitiate the generalization that we may judge roughly the type of individual by the physical environment surrounding him.⁵

These objective, observable features have been measured where it was possible to do so for each of the several economic groups included in this study. The results are worth noting since they bear out unquestionably what we have been recognizing all along, namely, that in economic or financial status of families lies most of the story of living standards. We have refrained thus far from a commitment as to what factors were casual in variations in living standards. As a matter of fact, it would be hazardous to set forth any specific factor as a sole cause of variation. Rather do we have a complex of factors which bear upon the economic aspects of family status on the one hand and upon the psychical and sociological aspects on the other. Among these latter factors are training and intelligence, interest in improving position, attitude toward work, social and traditional custom of the group.⁶ Poverty and prosperity are, after all, but relative terms used to describe differences in social or economic condition in a known period. In the absolute they tell us little. This we need to be aware of in studying differences among groups so as not to be misled into the belief that poverty is concomitant with destitution or abject want. Such extreme situations, while deplorable, are not widespread in Virginia communities, either rural or urban.

It is perhaps truer of rural than of urban life that the gradations of social status are more rigid and confining. Dr. Galpin's reference to the "inertia of sheer custom" explains all too frequently why poor families remain poor, why we may expect to find one year hence, or

5. We speak here in a general social sense, recognizing all the while that exceptional instances exist in the case of particular families or individuals who are out of the environment or setting in which they might more properly be located.

6. C. J. Galpin in his *Rural Social Problems* observes that the inertia of sheer custom keeps many individuals on a given standard of living, whether low or high, pp. 47-49.

two years hence, or a generation hence, the same living standards in given families which now prevail. Bound to the soil in a manner against which logic and reason, and the force of economic laws have no appeal, individuals of a type struggle on, seemingly oblivious to the fact that hope for improvement might be simply in a change of environment. This is truest of the poorest types. It is this lack of initiative which frequently makes low living standards a customary and inescapable eventuality.

a. Farm Acreages Among the Three Virginia Groups

Poor farmers in the state live on farms averaging 154.5 acres, according to the findings of this study. Farmers of the intermediate group average 195.9 acres, while those classed as prosperous hold 341 acres. These averages indicate acreages considerably higher than the averages obtained through analysis of the census reports, but a good part of the discrepancy may be accounted for in the fact that here we are dealing only with white farmers, while the census acreages for Virginia are not separated for white and colored families. It is patent that the average land holding of the Negro farmer is less than that of the white farmer, and consequently the state average for white farmers would be higher if figures for colored farmers could be eliminated from the totals.

It appears that the poor farmers cultivate only 31 per cent of their total acreage, while the intermediate and prosperous groups hold in arable land, 52 and 68 per cent, respectively. In other words, while the total acreage of the intermediate group is one-fourth more than the poor farmer, yet he cultivates twice as much of his land. Now it happens in many cases that the land of the poor farmers is out of condition either through negligence on the part of the present occupant, or of someone who preceded him. There is, moreover, a natural drift of poor farmers to poor lands. These factors explain in large measure lower acreages of arable land. They do not explain, however, the lower percentage for the poor group which land under cultivation bears to total farm acreage. And so we need to look further into the picture of physical environment.

Nearly two-thirds of the farms of poor families were reported as being hilly, while but slightly more than one-third of those of the intermediate group, and only one-sixth of those of the prosperous group were thus classified. Almost half of the farms in the poor group were designated "rough," that is, presenting unusual difficul-

ties in the usual and customary methods of tillage. Slightly more than one-fourth of the farms of the intermediate group, and approximately one-fifth of those of the prosperous farmers were reported as being "rough."

These findings seem to be consistent with the popular belief that the less able and efficient of a group tend to become shifted to the least desirable locations. And naturally we should expect to find the greatest backwardness in the hilly and less accessible areas. Here there is less contact with influences of a higher type; here, also, less interest in developing contacts beyond the immediately adjacent community, if indeed the sphere of contact extends much beyond the family group itself.

b. Physical Surroundings of Virginia Farmers

The dwelling of the average Virginia farm family of the poor group is of frame construction, in most instances badly in need of paint and repairs. All the families of the poor group interviewed in this study were found living in frame structures, and this may be said to be typical for the greater portion of the state. A few poor farmers will be found occupying dwellings of stone or brick—frequently the habitations of farmers once more prosperous; occasionally one finds dwellings once pretentious, now housing poor families, but these instances are exceptional.

Poor farm homes are usually characterized by disorder and unattractiveness. It is only fair to observe, however, that a small number of the poor families have a fine appreciation of order and respect for appearance.

One enters the dwelling of the average poor farmer to find that it contains 5.8 rooms, of which 3.0 are devoted to sleeping. If we account for the kitchen as one room, there remains for the living quarters, 1.8 rooms. The family eats mostly in the kitchen where the cooking is done, and in the winter months confines itself for living purposes to two or three rooms at most. The universality of this concentration among the poorer families arises from the lack of heating facilities for the entire household. In none of the families of the poor group were modern heating arrangements installed. Stoves and, in many instances, open grates serve for heating the rooms which the family occupies during the cold months. Wood is the principal form of fuel for heating, in most cases being supplied from the woodland of the farm occupied.

The use of oil lamps for lighting is almost universal among poor

farmers, only one household being recorded as having either electricity or gas.

While frame dwellings predominate in the intermediate and prosperous groups, as in the poor, they are of more substantial construction and provide more adequately for utility, convenience and comfort. The average number of rooms in the home of the intermediate farmer is 7.4. Bedrooms account for an average of 3.7, or nearly one more than for the poor group. Homes of prosperous farmers average 10.6 rooms, with 4.5 reserved for sleeping.

Modern heating devices are not common among farmers of the intermediate group, but we find the use of stoves fairly general throughout the entire house during the cold months. In farm homes of the prosperous group, central heating plants of one sort or another are more common. The figures show that over 40 per cent of the homes of this group were equipped with modern systems of heating. Coal comes in as an important item in the budgets of those farm homes which have modern heating devices, though it is questionable if, when all labor costs are fully considered, there is much greater economy in the use of wood than of coal.

In approximately one-fifth of the homes of the intermediate group, electricity or gas is used for lighting, and in the prosperous group fully three-fourths of the families enjoy one or the other of these conveniences.

Where we find electricity installed, further use is generally made of the service in the operation of labor saving devices, such as washing machines, separators, pumps, and so forth. It is not unlikely that considerable extension of electric service for farm use will ensue as the result of the very lively interest which is being displayed on the part of manufacturers as well as potential users of electricity living in the rural sections.

Other evidences of wide differences existing between the several living standards groups are not lacking. The inadequacy of facilities for procuring water furnish another example in point. Only two of the forty families which comprise the poor group in this study were supplied with running water in the home. Twenty per cent of the homes of the intermediate group, and seventy-five per cent of those of the prosperous group enjoyed these facilities. None of the poor homes had bathrooms, while both the intermediate and prosperous groups were thus equipped to the extent that running water was available in the house.

The telephone has come to play an almost indispensable rôle in farm life. Its availability extends the scope of community relationships and is thus, in a sense, a partial index of living modes. Yet, among poor families, only one-sixth had telephones, while six-tenths of the families of the intermediate group and all of those in the prosperous group enjoyed this service.

Mention was made in the discussion of the expenditures of farm families of the use of automobiles among the several groups. Here we need only note again that the automobile comes in as a convenience for the poor and intermediate groups somewhat disproportionately to the existence of other conveniences of the household. We find 42 per cent of the poor farmers owning cars (we should say "operating," for it is doubtful that all of them are ever completely paid for) and more than three-fourths of the intermediate group in the car-owning class. Much may be said for the value of the automobile as an influence for socialization. Equally as much may be said of its misuse where prime wants are often foregone in order to possess a car.

6. CULTURAL AND RECREATIONAL ACTIVITIES

a. The Utilization of Time on Farms

In order to complete the picture of the quality of living enjoyed by farm families in Virginia we need to observe something of the manner in which they spend their time. Interest in those phases of life not purely economic, which we may designate as factors of culture and socialization, measure, we believe, the wholesomeness of family life. Those families whose interests are directed toward the development of healthy relationships and activities of the community are obviously experiencing a form of living superior to those whose outside contacts are limited. For, take life according to whatever philosophy we may, the individual in the existing social order is an integral part of the social group, and social progress is advanced or retarded to the extent that its individual members are active or passive in extending those forms of social intercourse which are elevating or which intensify or extend the wholesomeness of social relationships.

The importance of play and entertainment in the individual life need not be discussed at great length here. Sociological research has demonstrated the value of recreational activities, if simple judgment has not been sufficient in all cases. Social institutions and agencies have come to recognize the need for providing play activities. The church, in earlier times foe to the idea that individuals might with

impunity seek diversion in games and other forms of heathly entertainment, has at last opened its own doors to encourage what it formerly denounced, admitting the spiritual and moral value of play as well as of worship.

Appropriate in a discussion of rural recreational activities is the concluding paragraph of a chapter on "The Problem of Rural Recreation" ⁷ in Carl Taylor's *Rural Sociology*.

"The stern and arduous work life that farm people have been compelled to live has developed in them a philosophy of life which has condemned all pleasure seeking. Farm labor does not develop the body symmetrically; it develops neither alertness of thinking nor co-operative actions. . . . Rural people need recreation, because they need relaxation or release from the monotony and routine of farm tasks. They need a program of constructive use for their leisure time. And they need the social contacts and community spirit that are engendered by social and recreational events."

Let us examine the facts at hand respecting the utilization of time by the Virginia farmer. Table 29 is constructed to summarize the information which was obtained through personal questioning.

It appears that the working time varies negligibly for farmers of the three groups, averaging between twelve and thirteen hours in the summer months, and slightly more than ten in the winter ones. These seemingly long hours must be modified with the statement that they hardly represent a continuous period of intense labor, even allowing for meal interruptions. At only certain seasons of the year are very severe strains imposed in labor intensity. Allowance for such factors as independence of action permitting interruption of work, time consumed in "resting spells" and in going to and from the field are essential if we attempt to compare the working hours of farmers with those of city workers.⁸

Kirkpatrick in his study of the living standards of farmers in eleven states found that the length of the working day averaged 11.4 hours for the homemaker, and 11.3 for the farm operator. Since this was apparently an average for the entire year, there is probably little if any, difference between the working hours of farmers in Virginia, where the yearly average would approximate 11.2 hours per day, and those in other states.

There seemed to be little difference in the hours of work per day reported for farmers and for homemakers, principally the wives of

7. Taylor, Carl C., *Rural Sociology*, pp. 374-375.

8. This matter is discussed later in the present study. See pp. 104-109.

TABLE 29
UTILIZATION OF TIME OF VIRGINIA FARM FAMILIES

| | Hours in working day Sum- mer | Hours spent in reading Win- ter | Visiting in community Per month | Trips to town by family Per month | Trips for pleasure or rest Per year | Entertainment | | |
|--------------------|-------------------------------------|---------------------------------------|------------------------------------|--|---|--|-------------------------------------|-------------------------------------|
| | | | | | | At home | Outside home | |
| Poor | 12.0 | 10.0 | 6.3 | 5% none at all 2% less than once 41% once 53% twice or more | 3.7 times | 77% none 19% one 4% two or more | 90% rarely 10% occa- sionally | 95% rarely 5% occa- sionally |
| Intermediate | 12.6 | 10.5 | 10.1 | 2% none at all 6% less than once 36% once 56% twice or more | 6.4 times | 62% none 25% one 13% two or more | 66% rarely 28% occa- sionally | 74% rarely 20% occa- sionally |
| Prosperous | 12.8 | 10.3 | 19.9 | 42% once 58% twice or more | 8.5 times | 17% none 24% one 59% two or more | 16% rarely 25% occa- sionally | 25% rarely 33% occa- sionally |
| | | | | | | | 16% frequently | 6% frequently |
| | | | | | | | 16% rarely 25% occa- sionally | 25% rarely 33% occa- sionally |
| | | | | | | | 59% frequently | 42% frequently |

farmers. Their duties, while unlike in nature, are time-consuming in approximately equal measure. Kirkpatrick's study revealed a similar correspondence between the hours of labor for operators and homemakers.

b. Time Spent in Reading

It was observed in the present study that families enjoying relatively higher living standards devoted more time to reading than those below them, and that as we ascend the scale of living we find greater diversity in the reading matter and more of it in the case of particular families. The data in Table 29 on hours spent in reading per week represents the combined reading time of the farmer and his wife or homemaker. In the poor group, an average of slightly more than six hours per family was devoted to reading. This consisted in the main of the country papers and occasionally a daily paper. Where other reading matter is found, it is generally in the form of short stories of an emotional or sensational nature. It is significant in this group also to note that in many families the reading done is almost nil; in others it is irregular or spasmodic. The average for the group reaches the given level mainly because of a few inveterate readers who devote more time to reading than the best interests of their work sanction.

Farmers in the intermediate group average almost 50 per cent more reading than those in the poor group, with ten hours weekly devoted to this aspect of living. Among this group also the newspaper predominates as the source of reading, though here we find a greater variety of reading matter than in the lower group. Weekly and monthly magazines and journals find their way into homes of this group, and a considerable interest is displayed by some families in the reading of books. Here too, the practice of reading regularly is more widespread among the families, and there is a better balance of time spent in reading on the part of the farmer and his wife.

It is among the prosperous families, as we should expect, that reading comes to be an almost universal custom. Families of this group spend on the average nearly nineteen hours weekly in reading, which is almost twice the amount of time spent by the intermediate group, and slightly more than three times as much time as poor families devote to this subject. The prosperous group may be said to read everything in some degree, but primarily its reading consists in the daily and weekly papers, periodicals of an elevating and in-

structive sort, and acceptable books. Best sellers must be included in the listing along with those of a high literary value. In the majority of cases the type of reading is high.⁹

c. Community Visiting

Visiting friends and neighbors in a social manner is customary in the three living standard groups, and to approximately the same extent. A comparatively negligible percentage of the poor and intermediate groups report no regular visiting at all, but even here it will be found that in most instances the failure to do so is not so much due to lack of desire, but is rather the result of restricting circumstances of one sort and another. More than fifty per cent of all the families studied visit friends or relatives twice or more monthly. Doubtless the automobile has been a factor to extend the matter of visiting, and as was remarked in a previous chapter, no minimization of the wholesome effects thus derived from car ownership or operation can be made.

The value of visiting with friends is tremendous as a socializing influence. On such occasions, thoughts and opinions are expressed, and ideas which give broader horizons to mentality may be developed. It is traditionally true that the Virginian is a master at making conversation, and one finds today that the representative farmer is interested in questions extending beyond the field of his immediate community. A combination of forces have tended to give him enlightenment upon national and international questions, and to extend his interest in social and economic problems of the day. Friendly discourse through visiting affords a means of more complete understanding of facts gleaned through reading or through the radio. In the words of Izaak Walton who said that good company and good discourse are the very sinews of virtue, is epitomized the reason for an expression of the hope that in Virginia rural life there may be no lessening of the habit of regular visiting.

d. Trips to Town

There is an appreciable difference in the frequency of trips to town among the three economic groups in Virginia. Poor farmers average less than once weekly, while the intermediate group av-

9. In this group we find greater interest displayed in bulletins and periodicals pertinent to farming and farm life. In the other groups these are subject to only occasional perusal.

erages approximately twice the frequency of the poor families. Families of the prosperous group average fully two trips to town per week. As here considered, trips to town cover those instances when the entire family or a majority of its members make an "occasion" of it. Occasional and hurried journeys for business purely, were not considered in arriving at the averages under this heading.

Trips to town permit many contacts of social value. The town gathering on Saturday or court day has at all times served as a strong force in the recreational life of the farmer. Here most of the families of the community are to be found, doing more talking than marketing generally, but helping others and themselves in the discussion and exchange of ideas, relieved for the time from the monotony of farm routine. The nature of such a gathering is greatly changed with the shortening of distances to larger areas and with the wide extension of the motion picture and other forms of community entertainment.

e. Entertainment

Coming to the matter of entertainment in farm families, a first question is the sources through which this form of diversion is provided. We may consider entertainment under two broad divisions; where it is furnished within the home, or away from home.

Home entertainment pertains to parties, dances, club meetings, or musical gatherings within the homes of families in the community. It is differentiated from the entertainment which comes through other sources in that the members of the group entertaining, as well as those who are being entertained, are participating actively in the function in a sociable manner.¹⁰ Entertainment outside the home covers, for the most part, those forms of amusement and recreation in which the relationship between entertainers and entertained is impersonal. Moreover, this source is most frequently one requiring payment, as in the case of the movies, theatres, lectures, musical concerts, and the like. Undoubtedly, both forms of entertainment possess merit when in proper balance. Home entertainment is to be commended primarily because of its salutary effects on home life and unity. The tendency of late years, however, seems to be in the opposite direction. The lure of the paid entertainer has been a distract-

10. Where plays or other entertainments are gotten up by local talent and presented to the community, we have included them under the head of "home entertainment" for in social effect they come within this designation.

ing influence to community spirit and the integrity of family and group relationships.

Poor farm families enjoy a negligible amount of specially planned or ordered entertainment, either within or outside the home. On the basis of a three-fold classification of frequency, the order of which is "rarely," "occasionally," and "frequently," poor families report 90 per cent rarely and 10 per cent occasionally, for entertainment at home and still less for entertainment obtained outside the home.

Families of the intermediate group present an appreciably better showing, though even here two-thirds of the families rarely have home entertainment and nearly three-fourths report "rarely" for entertainment outside the home. In the prosperous group we find the most wholesome situation. Here the larger percentages report "occasionally" and "frequently" for entertainment both at home and outside the home.

We may conclude from the findings shown in Table 29 that there is a deplorable insufficiency of formal entertainment in the case of poor farm families and a very great need for an extension of such facilities for families in the intermediate group. The fact that families seem to be satisfied in their present status cannot be imposed as an argument to gainsay the need for improvement. No profound sociological theories need be brought forth in the contention that a more wholesome form of living would in large measure necessitate an eradication of the deficiencies which exist in the matter of entertainment for the poor and intermediate groups of families in the Virginia farm community.

A strikingly similar situation exists respecting the experience of families in pleasure or rest trips away from home. In less than one-fourth of the poor families either the operator or homemaker gets away from home for a period of several days or longer. About one-fifth reported such visits away from home once a year, while only one or two reported more than one per year. The facts are somewhat better for the intermediate group in which we find one-fourth of the families enabled to get away once a year for visits extending over several days, while thirteen per cent of them get away twice, or more often in the course of the year. In prosperous families a fourth get in one annual visit of some length, and approximately six-tenths of them report two or more vacations or rest trips.

And so again we see wherein the economic or financial status of the family tends to make for a gradation of cultural and wholesome

activities proportional to its ability to sustain the costs therefor. It is doubtful if the financial status is responsible in all instances, however, for the failure of families of the lower standards group to get out and away from their immediate community for visits. Inertia and custom enter as factors to keep them at home sometimes when no other restraints prevail.

CHAPTER IV

City Living Standards

1. INTRODUCTION

A CLASSIFICATION of living standards in city populations may follow a similar grouping to that which was applied in the study of farm living standards. Roughly, the population of any city may be divided among the same three groups—the poor, the large middle group, here termed the “intermediate” group, and the prosperous. No great difficulty is encountered in selecting through rather adequate objective data a representative sample of families which typify each of the groups of this classification. This method was followed in obtaining within the city of Lynchburg a cross-section of the population with respect to its living standards.

In the following discussion we shall set forth the findings according to the records obtained for each of the living standard groups considered and interpret them largely in the light of their differences. In addition we shall carry over from the preceding treatment of farm living standards certain of the statistical demonstrations developed in that section.

It is not presumed that farm and city living standards are entirely comparable through statistical demonstration, certainly not with the present status of our measuring mechanisms. Differences thus will be found, however, which bear examination, and the desirability of setting them together is justified by virtue of the fact that we are more often led to think penetratingly when confronted with things more or less incomparable than we are when the obvious stares forth without fear of contradiction.

We need always to keep in mind that rural and urban life in many ways are fundamentally different and that the psychological processes and effects are not possible of measurement in such manner as to permit of absolute comparison. In fact between different economic groups and individuals within those groups even in the same community we shall observe radical differences in the psychological processes and the relative appreciation of values. So that, theoretically at least, we could maintain that there is no point whatsoever in noting differences, since the individual mind alone knows its satisfactions and denials. This contention, however, we must ignore, in the light of accepted generalizations which come out of observation and ex-

perience, and which furnish us with an approximate basis for comparison.

By and large, individual success in life is calculated in the ability to enjoy certain satisfactions, to acquire material goods, or to experience the attainment of desires of one sort and another. And in the measure that the individual or family is successful in accomplishing these recognized satisfactions, he or it is counted as high or low in the level of life. On this sole basis then rests the point of any comparisons between groups.¹

If, then, we have before us a number of these recognized criteria and indexes of measurement for people who occupy different social and economic levels, we are in position, as a minimum accomplishment, to point out the differences in living standards according to the exactness of our measurement.

It is not appropriate here to digress far afield into a discussion of the relative merits of city and farm life. Each thinker on the subject has his own system of logical inference to support his particular contention. There are compensations in living in either which the other does not experience. Moreover, the type of mind has much to do with this whole question—we cannot escape from the difference in mental processes of the country and city dwellers, that is, of those persons who are at peace with their status as farmers or as city dwellers. Many of these psychological aspects are immeasurable and hence present a wall against which we cannot use the forces of statistical data for conclusive analysis.

This we may observe briefly—that country life as an independent, wholesome life cannot be excelled by conditions ordinarily found in cities. With the comforts and conveniences of the modern city community slowly but surely becoming extended so as to reach country families whose desires to have them are coupled with the financial capacity to acquire them, we can construct an ideal picture of rural life in which the material features of modern city living are included along with the most desirable rural features. If it is charged that this is but the fancy of a hope for the future, we may answer that

1. Taylor in his *Rural Sociology*, p. 111, says, "Notwithstanding the difference between the setting and scheme of rural and city life, it is becoming an increasingly important fact that the standards of expenditure for goods that can be bought only in the market is the social and psychic standard that rural people desire. On no other basis can the modern farmer's mad drive for income and wealth, even at the cost of unending fatigue, be explained. A comparison of rural family standards of expenditure with those of city dwellers is, therefore, a comparison which is constantly, both unconsciously and consciously, in the farmer's mind."

already certain marked advances have been made in the direction described.

The realization of such an ideal may involve a breaking down of the barriers of difference in the psychology of rural and urban life, though it is questionable if ever we shall succeed in obliterating the individualistic concepts which inhere in the nature of farm life. And this, and other distinctive rural traits, undoubtedly are worth preservation in a nation which is all too rapidly becoming mechanistic not only in its industrial activities but in its cultural and recreational aspects as well.

2. CITY POPULATION

The urban population of Virginia in 1920 represented 29.2 per cent of the total for the State. This is considerably lower than the figures prevailing for the entire United States, which show that 51.4 per cent of the people were resident in towns and cities having a population of 2,500 or more. By comparison with the census data for other years, we observe that Virginia has urbanized to a greater degree since 1900 and 1910 than has been experienced for the United States as a whole.

TABLE 30

PERCENTAGE OF TOTAL POPULATION LIVING IN CITIES AND TOWNS OF 2,500 OR MORE INHABITANTS

| | Census Decade | | | Relative Increase | |
|---------------------|---------------|------|------|-------------------|----------------|
| | 1900 | 1910 | 1920 | 1910 over 1900 | 1920 over 1910 |
| United States | 40.0 | 45.9 | 51.4 | 14.8 | 12.0 |
| Virginia | 18.3 | 23.1 | 29.2 | 26.2 | 26.4 |

This tendency is shown in the accompanying table. The last two columns indicate that, whereas for the entire United States in the years 1910 and 1920 the percentage relationship existent between urban and rural population increased in favor of greater urbanization to the extent of 14.8 per cent and 12.0 per cent, respectively, over the next preceding census, Virginia, on the same basis of comparison, shows relative increases of 26.2 per cent and 26.4 per cent. And, while it is still true that Virginia is predominantly an agricultural state, it is apparent also that it is rapidly undergoing the processes of urbanization.

Figures since 1920 are not available for the State comparisons, but if we take the 18 Virginia cities for which comparable figures exist, we find that in 1920 the population of these areas represented 27.0 per

cent of the total State population while in 1926 the relationship had increased to 28.3 per cent. Undoubtedly, if we were able to secure population figures for the towns and villages which have been developing industrially over the State in recent years the degree of urbanization would be further emphasized.²

Thus Virginia takes place among the leading political units in this characteristic cityward trend. Being one of the States in that section of the country which is in the process of a rapidly growing industrialization the movement toward the city will not soon subside. The economic effects of such a development have thus far proved salutary. Social problems have come to the foreground for solution in this new order. Not that urbanization is responsible for the problems themselves; for they exist also in purely rural communities as well, but rather because growing cities are more alive to their social needs, more unified in their social interests, more capable insofar as administrative and regulatory processes function.

3. NATURE OF THE CITY SAMPLE

Data for the study of living standards in the Virginia urban group were gathered in the city of Lynchburg, the selection of which area has been explained earlier.³ One hundred and forty families were personally visited and questioned on matters pertaining to the various aspects and conditions of living. Objective criteria formed here, as in the case of the farm sample, furnish the basis for the selection of families representative of each of the three living standard groups. More than twice as many families of the preponderating intermediate group were visited than for either the poor or prosperous groups, and this was justified in the sole fact that this middle group represents the bulk of the population.

Table 31 indicates the composition of the sample from the standpoint of household and family members in each of the several groups. Differences between city and farm families in this respect are not so great as to affect appreciably any of the comparisons in which family size would enter as a conditioning factor.

The occupational grades are fairly well defined for each of the three living standards groups. Poor families are confined largely to

2. These relationships for Virginia were developed for the Census years 1900, 1910 and 1920. If we include in our urban figures the population of incorporated towns and villages of 2,500 and less inhabitants we find that for the three censuses the urban population comprised 22.9 per cent, 28.6 per cent and 34.4 per cent respectively.

3. See this study, Chapter I, p. 13.

TABLE 31
URBAN AND RURAL FAMILY COMPOSITION

| | Average number of individuals in household | Average number of in- dividuals in immediate family living at home |
|--------------|--|--|
| Poor | | |
| Urban | 4.3 | 4.3 |
| Rural | 4.4 | 4.1 |
| Intermediate | | |
| Urban | 5.1 | 4.9 |
| Rural | 5.2 | 4.7 |
| Prosperous | | |
| Urban | 6.2 | 5.0 |
| Rural | 5.6 | 4.7 |

employments where the degree of skill and ingenuity is not great. Typical here are the average textile mill operators, lower grade shop workers, and day laborers. Families of the intermediate group are characterized by employments such as skilled mechanical operators in the mills and factories, clerical workers in offices, banks and stores, sales work and similar grades of activity. The prosperous group is represented in the main by the professional types, owners and higher executives in the business field and families of independent means which are no longer engaged actually in business. Such is the situation in Lynchburg, and it is not likely that any very exceptional differences exist between the composition of its population and that of other urban areas throughout this state considered as a whole. Lynchburg has been characterized as a "conservative" city but its designation as such has arisen principally out of the fact that its growth has not kept pace with the more sporadic developments which have been experienced by certain other cities in the State. It is believed that Lynchburg is more representative of the Virginia urban population *en masse* than any other single area.

4. LIVING COSTS FOR CITY FAMILIES

It has been observed previously in this discussion that an analysis of living costs of families affords in a considerable degree the basis for interpreting the sociological aspects of human life and endeavor. Through such analyses we can learn in some measure of the manner in which incomes are spent, how different economic groups distribute their available funds for the wants and satisfactions of life, the effect of location and environment upon the nature of spending and the restrictions upon advancement which limited incomes impose upon poor families as well

as the exceptional opportunities for improvement which those of a higher economic status enjoy.

To the extent that our analysis permits of the determination of a norm in living standards, that is, an adequate and wholesome condition of life, we are able to see wherein deficiencies in particular families or groups of families are existent. It may be found that incomes are inadequate or that improper or inefficient management of the family income is responsible for unbalanced conditions of living. Whatever the cause may be is a point beside the substance of our finding that conditions are ideal or deplorable.

The following analysis of the data obtained from families in the city of Lynchburg constitutes a statement of a reality—a picture of conditions as they are found in a Virginia urban community.

Total living expenditures for Virginia city families average \$977 for the poor group, \$1,959 for the intermediate group, and \$6,771 for the prosperous group.

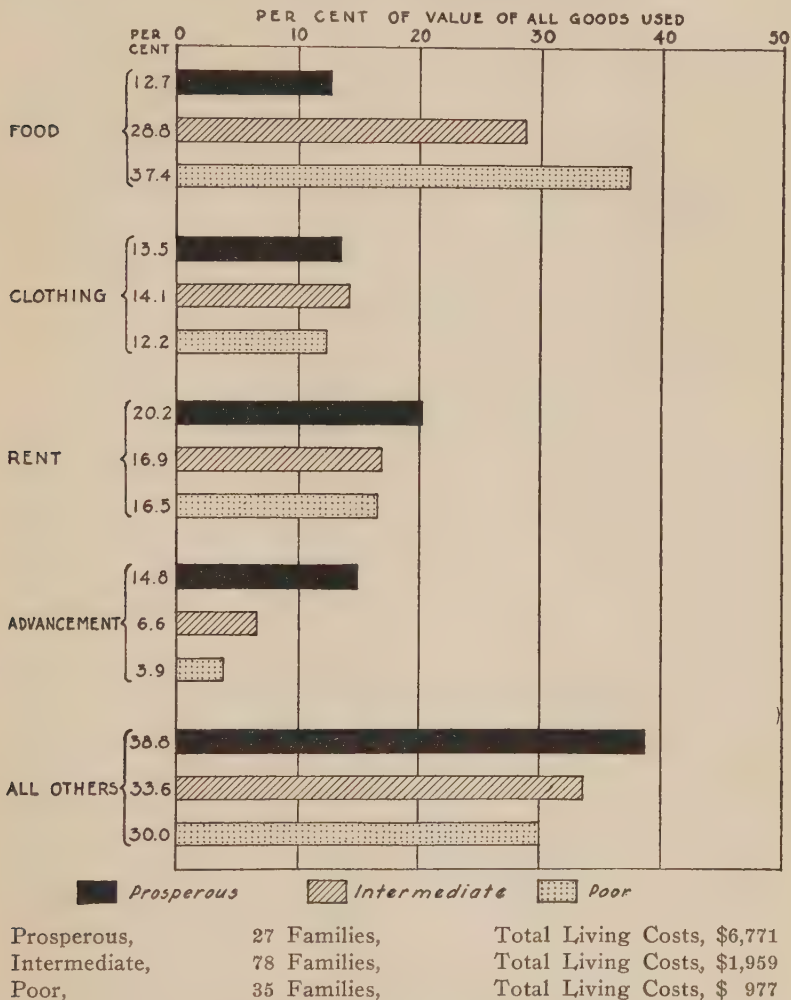
TABLE 32
DISTRIBUTION OF THE ANNUAL AVERAGE LIVING COSTS OF CITY FAMILIES
ACCORDING TO PRINCIPAL ITEMS OF EXPENDITURE

| | Poor | Amount Inter- mediate | Pros- perous | Percentage Distribution | | |
|--|----------|-----------------------------|-----------------|-------------------------|-------------------|-----------------|
| | | | | Poor | Inter- mediate | Pros- perous |
| Food | \$365.57 | \$ 554.46 | \$ 859.61 | 37.43 | 28.81 | 12.70 |
| Clothing | 119.32 | 275.96 | 913.62 | 12.22 | 14.09 | 13.49 |
| Rent | 161.08 | 331.76 | 1,365.18 | 16.49 | 16.94 | 20.16 |
| Household operating ex- penses | 157.65 | 363.75 | 1,355.30 | 16.14 | 18.57 | 20.02 |
| Household furnishing and equipment..... | 18.90 | 56.27 | 219.97 | 1.93 | 2.87 | 3.25 |
| Personal | 29.24 | 69.51 | 292.76 | 2.99 | 3.55 | 4.32 |
| Health | 37.69 | 90.22 | 222.78 | 3.86 | 4.61 | 3.29 |
| Life and health insur- ance | 49.04 | 78.47 | 539.31 | 5.02 | 4.01 | 7.96 |
| Advancement and recre- ational | 38.31 | 128.20 | 1,002.26 | 3.92 | 6.55 | 14.81 |
| Total..... | \$976.80 | \$1,958.60 | \$6,770.79 | 100.0 | 100.0 | 100.0 |

From Table 32 it appears that poor families spend only half as much as families of the intermediate group, while the expenditures of prosperous families are nearly two and one-half times greater than those of the middle group. In the study of farm families, we observed that the expenditures of poor families were also approximately half as great

FIGURE 2

PERCENTAGE DISTRIBUTION OF LIVING COSTS PER CITY FAMILY ACCORDING TO PRINCIPAL ITEMS OF EXPENDITURE AND SOCIAL GROUPS



as those of the intermediate group, while those of the prosperous group were slightly one and one-third times greater than the middle group incurred for family living purposes. This reveals a greater spread or difference between the average levels of expenditure of the poor and prosperous groups in city families than obtains in farm families.

5. Food

The largest single item of the budget of city families of the poor and intermediate groups is that of food. This item is fifth on the list for families of the prosperous group in the city, but takes first place in all three groups of farm families.

Table 32 gives the amount in dollars and the percentage distribution for food expenditures in city families. Poor families spend \$366, or 37.43 per cent of their total living costs, for food. Among farm families of the poor group, food expenditures averaged \$435 which was equivalent to 48.80 per cent of their total living costs. A considerable part of the difference in the food costs of the poor group on the farm and in the city is due to the unusually high consumption of two food products; namely, milk and pork. As is noted in the succeeding chapter dealing with the nutritive value of food consumed by farm and city families, there is undoubtedly a greater amount of waste in the use of those foods which the farm family produces for its own consumption. It appears that when tested on the basis of the adequacy of food poor families in the city fall somewhat below those of the country. With the standard of nutrition taken as 100, poor city families show the following ratings: energy 99, protein 99, calcium 55, phosphorous 72, and iron 84. Farm families of this group show: energy 131, protein 159, calcium 172, phosphorous 138, and iron 118.⁴

Intermediate group families in the city spend \$554 for food. This is in excess of the food expenditures of poor city families by 54 per cent, but is less than the intermediate group of farm families by 17 per cent. The percentage of total family living costs represented in food for this group in the city is 28.81, while for farm families of the same group, food constitutes 39.35 per cent of the total costs. Tested upon standards of nutrition the food of the intermediate group rates appreciably higher in adequacy than the poor group of the city, though it falls considerably below the intermediate farm group in this respect.

Among the prosperous city families, food costs average \$860 a year. This is 52 per cent higher than the intermediate city group, but only 86 per cent of the value of food used by prosperous farm families. Only 12.7 per cent, or slightly more than one-eighth of the total living costs of prosperous city families went for food, whereas,

4. See this study, Chapter VI, Nutritive Value of Foods, etc., p. 170.

among farm families this item represented 24.35 per cent, or nearly one-fourth of the total budget. The nutritive analysis shows that prosperous city families are providing a more nearly adequate diet for themselves than are the families of the intermediate group, though they rate substantially below their corresponding group of farm families. As is shown in the succeeding discussion on nutrition, their deficiencies are in energy, phosphorous and iron. They enjoy a surplus in protein and calcium content.

Further light is shed on the matter of food costs if we reduce our figures to show the average daily cost per family and per adult male equivalent in each of the groups.

TABLE 33
COMPARATIVE FOOD COSTS
Average Daily Cost of Food Per Family and Per Adult Male
Equivalent in Farm and City Households

| | Per family per day | Per adult equivalent per day |
|--------------|--------------------|------------------------------|
| Poor | | |
| Farm | \$1.19 | \$.315 |
| City | 1.00 | .296 |
| Intermediate | | |
| Farm | 1.86 | .370 |
| City | 1.55 | .443 |
| Prosperous | | |
| Farm | 2.72 | .507 |
| City | 2.36 | .479 |

It is observed in Table 33 that poor families in the city spend least among all the groups for food with an average daily cost of 29.6 cents per day for each adult individual comprising the family, while the prosperous farm family ranks highest with an average daily expenditure per individual of 50.7 cents.⁵

Considering the nutritive adequacy of the food consumed by the several groups it appears that the expenditure of the poor city group is not sufficient to maintain the family in the best condition. The item most deficient here is calcium containing foods of which milk is perhaps the most satisfactory for family use. An increase in this item

5. It will be recalled from the preceding discussion that for deriving these figures the family is reduced to a certain number of adult male equivalent units, each member of the family being rated in equivalent terms according to age, sex and nature of activity.

sufficient to supply the deficiency would likely necessitate a substantial increase in food expenditures. That this particular deficiency does not exist among farm families is due unquestionably to the free supply of milk which is common to the farm. A similar deficiency in calcium exists in the intermediate group of city families. Since, however, their diets are already more than adequate in energy and protein content, it is likely that a more careful planning of meals—that is, a balancing of the diet, would relieve the existent deficiencies without incurring additional costs for food to this group. And obviously, within prosperous families, it is entirely a question of balancing the diet to improve whatever deficiencies are now existent. Here the question of economic ability to adjust improper diet does not enter.

6. CLOTHING

If minimum clothing requirements for comfort and decency are in any sense approximated by the spending of the intermediate group of city dwellers for this item, it appears that families of the poor group fall sadly short of their actual needs. Families in the intermediate group average \$276 annually for clothing. The number of individuals clothed per family in this group averages 4.9. Poor families spend but slightly more than two-fifths of the amount shown for the intermediate group to clothe an average number per family of 4.3 persons. Families of the prosperous group average \$914 for this item, or two and one-third times as much as the intermediate group for an average family of 5.0 members.

Reduced to an average monthly expenditure, poor families report \$9.92, families of the intermediate group \$22.99 and prosperous families \$76.14. These differences are wide and show a remarkably low average for poor families. It is believed that families of the intermediate group come nearer to combining the elements of decency, economy and comfort in their clothing habits than either the poor or prosperous. This observation would seem to have additional support in view of the findings of the Chicago Council of Social Agencies which in 1925 developed a standard budget termed the "minimum normal standard."⁶ This budget suggested that the following standard

6. As defined in the Chicago Standard Budget the minimum normal standard "must furnish everything necessary for a manner of living that will make possible a high standard of physical, mental and moral health and efficiency for adults. The full physical and mental growth and development of children, and provisions for their moral welfare."

monthly expenditures were requisite to meet the needs of the average wage-earner's family:

| | |
|---|-----------|
| For a man at ordinary outdoor work..... | \$ 5.90 |
| For a woman at home..... | 4.50 |
| For a working boy or girl..... | 7.15-9.15 |
| For a child 13 or over..... | 5.10 |

When we estimate the clothing requirements of the Virginia intermediate group based upon the estimates of the above data, we arrive at a figure which would fall somewhere between \$21 and \$23 per month for each family. It is obvious that the Chicago Budget contemplates the requirement for a type of family which would fall below that of the Virginia urban intermediate family, and it is therefore open to us to infer that the actual clothing costs of this group are somewhat lower than those which an ideal requirement would specify. However, we are at the same time reinforced in our first inference that the clothing needs of Virginia poor families were inadequately met with the monthly expenditure averaging \$9.92. To this inadequacy of the clothing expenditure of the poor group we may ascribe as primarily responsible inadequacy of income. For we shall observe throughout the list of expenditures of this group no items which average excessively high which would, if transferred to the item of clothing alone, greatly increase the figure already given.

Observation of the dress of poor families by the field workers in this study bears additionally to the proof of inadequacy. The member of the family most limited in clothing wants is the homemaker—the mothers in most instances. Her sacrifice is often severe and not infrequently she prefers to remain at home all the time with no socializing contacts rather than to supply herself with a minimum of “visiting” clothes, if to do so would be reflected in the clothing purchases for the children. This limitation is not apparent in the intermediate group of families, and unquestionably not in the prosperous group.

The dress of farm families is likely to be less exacting than for city families by and large. Ordinarily, the work of the operator on the farm demands clothing of a rougher sort which generally is cheaper. The children usually enjoy a more democratic environment in their school contacts, and hence suffer less from criticism of dress. Consequently, a simplicity of dress is observable in contrast with the dress of city children.

Despite the observations just noted the clothing costs of the country

and city are nearly identical for poor families and vary but little for the intermediate group. In the prosperous group, they are approximately one-half greater. Average monthly expenditures for clothing among poor farm families are \$9.43, while for city families they averaged \$9.92. Intermediate group farm families spend \$19.59 monthly as against \$22.99 for city families, while prosperous farm families spend \$55.73 per month and city families \$76.14. The widest differences are thus seen to exist between the prosperous groups in country and city.

The clothing costs of city families represent 12.22 per cent of the total living costs in the poor group, 14.09 per cent in the intermediate group, and 13.49 in the prosperous. This relationship among farm families was found to be 12.68 for poor families, 13.65 for intermediate, and 16.37 for prosperous. The percentage relationship differs most in the prosperous group families and shows highest for the farm families of this classification. It is worth noting that among city families of the three groups clothing constitutes the fourth most important item of the budget, as it does also in the case of farm families when the basis is dollar costs.

7. HOUSING

Expenditures for housing are of second importance in the living costs of city families of the poor group where they amount to \$161, or 16.49 per cent of total living costs. In the intermediate group, this item is third in importance, costing \$332, or 16.49 per cent of total living costs. Prosperous families average an annual rental expenditure of \$1,365, or 20.16 per cent of their total costs, and this item takes first place in the list of all their living expenditures. Absolute dollar costs for shelter are thus twice as great for intermediate families as for poor families, and prosperous families spend between three and four times as much as do those of the intermediate group.

For farm families, the rental value compiled for each of the groups averaged lower than for city families. The differences between the housing costs for poor and intermediate groups of farm and city families were not great. Poor farm families averaged \$131, or approximately 20 per cent less than the corresponding city group, while in the intermediate group, farm families averaged \$269, which also varied from the city families by about 20 per cent. Differences in the rental costs for prosperous farm and city families were much greater, the former amounting to \$679, or only 50 per cent of the city housing

costs. Affecting all city dwellings is the higher site value of real property which is directly reflected in the rentals charged for occupancy. The element of site value for farm dwellings is of much less importance in the calculation of rental costs.

What is the essential need in housing in order that families may maintain a respectable and wholesome atmosphere? How much room space is needed for the family and what are the conveniences without which the family welfare is adversely affected? Such questions as these are of basic importance in considering the interests of different social classes. It is at once appreciated that extreme differences are to be expected as we range from poor families to those at the top of the social scale.

Studies of the nature and scope of the United States Bureau of Labor Statistics, the National Conference on Social Work and the New York Factory Investigating Commission have presented the view that the minimum standard need for providing adequately for the housing of the city family is from four to five rooms in addition to bathrooms. Various suggestions have been made as to the arrangement of rooms and their specific use in such studies, but the idea that the number of rooms should be approximate and tend to be in excess of the number in the family is recognized throughout.

If these requirements are an absolute minimum for the best interests of the family, it is evident that poor city families fall below the level of adequacy. With an average household membership of 4.3 persons, the number of rooms in the dwellings of this group average only 3.9. This is about 10 per cent below the lowest minimum requirement which is claimed by prominent authorities on the question of housing. Intermediate and prosperous families are provided adequately on this basis,⁷ the former with an average of 5.7 rooms for an average household of 5.1 persons, while the latter average 8.8 rooms for 6.2 persons. For all farm groups the number of living and bed rooms stands well in advance of the average family membership, and this brings out one distinctly preferable situation enjoyed by farm families over city families of the two lower groups, though other disadvantages may tend to affect this. Further discussion will be made of the matter of conveniences in the chapter on the environmental phases of city life.

7. If the standard basis as suggested by some authorities of $1\frac{1}{2}$ rooms per individual is applied here, poor families would show considerably more existing inadequacy and intermediate families would fall below the minimum needs.

8. PRIMARY WANTS

It will be recalled that in discussing the farm living costs some attention was given to the portion of the total budget taken by the three prime wants—food, clothing and shelter—considered as a single item.

TABLE 34
COST OF PRIMARY WANTS IN CITY FAMILIES

| | Amount | Primary wants as percentage of total living costs | Percentage left for other living costs |
|--------------------|-----------|---|--|
| Poor | \$ 645.97 | 66.14 | 33.86 |
| Intermediate | 1,172.18 | 59.84 | 40.16 |
| Prosperous | 3,138.41 | 46.35 | 53.65 |

Table 34 is produced to show the burden of expenditures for these primary wants upon the total fund for family living needs. It indicates that in the case of poor families two-thirds of the total fund is used in supplying the primary needs of life. In the case of farm families of this group, primary wants take slightly more than three-fourths of the total living costs. For the intermediate city group, it is seen that about three-fifths of the total living costs go for primary wants. Farm families of this group spent more than two-thirds on these items. Prosperous city families spend somewhat less than one-half their total living fund for primary wants, while this same group in the country spends nearly three-fifths. Too much may not be maintained for these differences, but they are worth questioning by critical minds in an effort to appreciate why they exist.

It is plausible from the above figures that the differences between poor and prosperous families in the relative expenditures for primary wants are greater in the city community than in the farm community. For, whereas the poor farm family spends on an average 33 per cent more of his total living costs for primary wants than does the prosperous farm family, the poor city family spends 42 per cent more than does the prosperous city family.

9. HOUSEHOLD OPERATING EXPENSES

Expenditures incident to the operation of the households of city families bulk large and roughly approximate the rental costs for each economic group. A like tendency was observed in the relationship between farm dwelling rental charges and farm household operating

costs and from these comparisons it is evident that a close correlation exists between the items in both farm and city families. As the type of residence becomes more adequate, as regards both size and equipment, we should expect to find the costs of operation increase accordingly. Moreover, as the social and economic status changes from the lower to the upper levels, a corresponding change would be reflected in the outlays for such items as servant help, the use of the telephone and automobile and other items which come under the head of household operating costs.

Among poor city families, these costs average \$158 and represent 16.14 per cent of the total living costs. Intermediate group families spend \$364, or 18.57 per cent of their total living costs, for such purposes; while prosperous families attain the high expenditure of \$1,355, or 20.02 per cent of all living costs. The percentages of total living costs shown for farm families for the operation of the household were 15.74 for the poor, 17.19 for the intermediate and 18.5 for prosperous families.

In this connection we can afford to examine a few of the detailed items entering this classification. The most important in use if not in value are the costs for fuel and light.

a. Fuel and Light

Table 35 shows that fuel and light costs in city families mount rapidly as we ascend the social scale, those of the prosperous group being four times as great as the poor, while the intermediate families fall between the poor and prosperous in this item.

TABLE 35
COST OF FUEL AND LIGHT FOR CITY FAMILIES

| | Amount | Per cent of total living costs |
|--------------------|----------|--------------------------------|
| Poor | \$ 66.72 | 6.83 |
| Intermediate | 109.82 | 5.61 |
| Prosperous | 263.15 | 3.89 |

There is, however, a decrease in the percentage relationship of these costs to total costs, indicating that while the quality of life is undoubtedly improved by reason of the fact that more dollars are spent on this account, there is at the same time a decreasing burden in the family budget as we move upward from the lower economic group.

The situation here differs from that of the entire classification of operation costs in which both the dollar expenditures and the percentage relationship increase in the higher levels. An analogous situation is developed in the farm groups where the relationship of expenditures for fuel and light to total living costs represent 6.86 per cent for poor families, and 5.18 per cent and 3.88 per cent for the intermediate and prosperous families, respectively.

Coal is almost universally used for heating among city families. In a few instances, oil burning furnaces are installed in the better class homes. A further discussion of heating and lighting methods follows in a later chapter.

b. Automobiles

The automobile finds a less widespread use among city families than among farm families. The following table presents pertinent data on the use of automobiles by city families in comparison with farm families.

TABLE 36
AUTOMOBILES IN CITY AND FARM FAMILIES

| | Poor | | Intermediate | | Prosperous | |
|---|----------|----------|--------------|-----------|------------|-----------|
| | City | Farm | City | Farm | City | Farm |
| Number of families reporting | 35 | 40 | 78 | 85 | 27 | 12 |
| Number of families with cars | 9 | 17 | 29 | 66 | 23 | 12 |
| Per cent of families having cars | 25.7 | 42.5 | 37.2 | 77.6 | 85.2 | 100 |
| Annual cost of operating and maintaining: ⁸ | | | | | | |
| Average cost per family for all families reporting | \$ 30.40 | \$ 43.49 | \$ 79.74 | \$ 136.72 | \$ 350.20 | \$ 352.79 |
| Percentage of total family living cost for all families reporting | 3.11 | 4.88 | 4.07 | 7.94 | 5.15 | 8.64 |
| Average cost per family for families with cars | \$118.22 | \$102.12 | \$214.48 | \$176.49 | \$411.08 | \$353.26 |

Briefly the story told in Table 36 is that city families as a group are not heavily burdened with costs incident to operating automobiles. The

8. Includes depreciation on basis of five years of life.

principal use of the automobile in city families is for recreation, while its use by farm families is about as much for necessary trips to town and around the community as for recreation. From a consideration of the actual utility then of automobiles as between farm and city families the balance of favor would seem to rest on the side of the farm family.

A fact worthy of note is that while the average farm family spends more than the city family for operation of automobiles when the entire group is included, if we separate from the entire group only those who own and operate cars and average the costs on a per family basis, each of the city groups exceeds the corresponding farm group in costs.

It cannot be held that the automobile is an unnecessary feature in the life of the city family. While from a purely utilitarian standpoint, the actual need for the automobile may be less for the average city dweller than for the farm family, still because of its value in a recreational sense and to the extent that it possesses a sort of tonic property in the confining atmosphere of city life, its use is to be encouraged. The farmer's use of it is to make distances shorter both in the interest of economy of time as well as for social reasons. His area of contact is widened thereby. The city dweller, on the other hand, finds his physical horizon widened and is furnished with wholesome change through the facility of the automobile. Who can say that in these broader applications the automobile is useful to one more specifically than to the other?

c. Furnishings and Equipment

City families incur heavier expenditures for household furnishings and equipment than farm families. Expenditures for poor families in the city average \$19, as against \$4 reported for farm families. The relationship of expenditures for these items to total living costs is 1.93 per cent for the average city family, and 0.44 per cent for the average farm family of the poor group. Thus city families spend 4.8 times as much as farm families.

In the intermediate families the excess of expenditure of city families over farm families is not so great relatively. With an average cost of \$56 or 2.87 per cent of the total family living costs, the city family spends 2.2 times as much as the farmer for furniture, rugs, pictures and articles of a similar nature. Moreover, the difference between the expenditures of poor and intermediate city families is not so great as between the poor and intermediate farm families.

The intermediate city family spends three times as much as his poor neighbor, while the intermediate farm family spends over six times as much. Observation of the type of furnishings in poor farm and city homes gives basis for the assertion that both are meagre and not infrequently altogether inadequate, yet as between the two the balance of favor rests with the city family. The internal adornments of the homes of intermediate farm and city families are much more comparable. And while even here the annual expenditures vary substantially, the differences may be explained in part at least by the fact that the high pressure advertising appeal of the city results in a larger disbursement of the family fund for these particular items. Farm families are deliberate and more conservative in their buying habits and perhaps even more careful in their judgment of values.

Prosperous city families show an annual outlay for furnishings and equipment averaging \$220, or 3.25 per cent of their total living costs. This is in excess of the corresponding farm family by 1.8 times, and in excess of the intermediate city family by 2.9 times. It is evident then that there exists a wider difference in the expenditures of the intermediate and prosperous city groups than in the same groups among farm families.

The data here shown result in the conclusion that the absolute dollar costs for furnishings and equipment as well as the percentage which they contribute of total living costs are higher for city families than for farm families. As the total fund available for family living needs increases the amount and percentage of the total budget going for furnishings increases. Also, we observe that the differences of the corresponding groups in the city and farm families are least pronounced for the intermediate group and most pronounced for the poor group families.

10. PERSONAL ITEMS OF EXPENDITURE

There is a close parallelism in the poor and intermediate farm and city percentages of total family living costs going for personal items including gifts, cosmetics, barber's costs, and tobacco. Poor families in the city report costs of \$29.24 for these items, or 2.99 per cent of all costs, while farm families showed 2.44 per cent. Intermediate families in the city spent \$69.51, which was 3.55 per cent of all expenditures. In farm families of this group the relationship of such items was 3.09 per cent of the total family living costs. A wider difference obtains for the prosperous families in the city and on the

farm. While city families spent \$293, or 4.32 per cent of their total living costs, farm families spent \$318, or 7.78 per cent.

From these data, one observes that in farm families the expenditures for personal items increases with increases in total living costs and that the percentage relationship increases likewise. In city families the expenditures increase with larger total expenditures, and the percentage of the total expenditures increases for the percentage of the poor and intermediate and prosperous families. However, in the prosperous city group, the percentage is disproportionately low when compared with the corresponding farm group.

With the desire to determine the particular items responsible for the lower expenditures in this classification the detailed schedules were reexamined. The item of gifts seemed to be the most variable and accordingly the results were tabulated. They are shown in the accompanying Table 37.

TABLE 37
RELATION TO TOTAL LIVING COSTS OF EXPENDITURES REPORTED FOR
GIFTS IN FARM AND CITY FAMILIES

| Per cent | Amount reported as spent for gifts | | Percentage of total liv- ing costs spent for gifts | |
|--------------------|---------------------------------------|---------|---|------|
| | City | Farm | City | Farm |
| Poor | \$ 2.72 | \$ 8.75 | 0.27 | 0.98 |
| Intermediate | 14.66 | 38.69 | 0.75 | 2.25 |
| Prosperous | 163.26 | 260.75 | 2.41 | 6.39 |

It appears from this table that poor city families incurred a very low expenditure for gifts, approximating only one-tenth of all costs for personal items, and that the corresponding farm group spends three times as much for gifts. The intermediate city group spends approximately three-fourths of one per cent of total living costs for gifts while the same group on the farm spends 2.25 per cent. And a like difference in relationship of the expenditures for gifts on the part of prosperous families in city and on the farm is observed.

Many families express their spirit of generosity through donations to charity and through religious contributions and take little thought of direct gifts to individuals of personal acquaintance. Because this is so in a fair number of instances a combining of all gifts, donations and charitable contributions has been effected in Table 38. This shows the total expenditures reported by the several groups in country and city and relates these to total family living costs.

TABLE 38
EXPENDITURES FOR CHURCH, CHARITY AND GIFTS AMONG
CITY AND FARM FAMILIES

| | Amount | | Per cent of total living costs | |
|--------------------|----------|----------|--------------------------------|------|
| | City | Farm | City | Farm |
| Poor | \$ 20.90 | \$ 17.90 | 2.14 | 2.01 |
| Intermediate | 60.18 | 67.91 | 3.07 | 3.95 |
| Prosperous | 534.55 | 385.29 | 7.90 | 9.44 |

That the supposition expressed in the preceding paragraph has foundation is borne out in the figures of Table 38. The wide differences which were observed in Table 37, when the analysis was simply on the basis of personal gifts, disappear in large measure when all contributions are considered. Poor city families exceed slightly the showing of farm families, while both the intermediate and prosperous city families substantially increase their "giving" of various sorts. The prosperous group in the city goes beyond the farm group in dollars spent but remains somewhat below in percentage of total living costs incurred on account of benevolences.

11. HEALTH

A family is not to be rated on its health in proportion to the degree of the expenditures made for medical service. For various reasons, some of which were enumerated in the section devoted to the discussions of health in farm families, only very general statements may be based upon the figures relating to health costs. Prosperous families show higher costs in part because of the fact that doctors are wont to charge for similar services according to the financial strength of the patient. Moreover, there is likely a considerable measure of charity work done for poor families. These questions become more complicated when we are considering relative costs between such groups as comprise farm and city families.

Nevertheless it is interesting to observe the reported costs for health which occur among the several groups. Poor city families report \$38 as the annual cost for this item, while farm families show \$23. The intermediate families average \$90 for the city and \$59 for the farm, while prosperous families report an average of \$223 for the city and \$110 for the farm. Thus, among poor families those in the city spend 65 per cent more than those on the farm, intermediate city families 53 per cent more, and prosperous city fam-

ilies 103 per cent more. The burden of health costs on the total budget likewise averages higher in the city than in the country, poor families in these respective areas showing 3.86 per cent and 2.59 per cent, intermediate families 4.61 per cent and 3.43 per cent, and prosperous families 3.29 and 2.70 per cent.

The relative merits of the farm and city life from the standpoint of health have been the subject of much discussion of a controversial nature. Ideas favorable to one or the other have generally been advanced according to the author's particular interest or bias. It appears that we can plead excellent cases for either if we are careful in our selection of sources. The truth is that we lack data which are thoroughly comparable as a basis for definite conclusions as to either. The claim of many that rural life is more "natural," and therefore more healthy, lacks force when we ask for a definition of the term "natural." Man's existence in the setting of "nature" alters the situation and his alterations frequently invite the most unhealthy conditions. If the city life with its congestion and the accompanying dangers of epidemic are offered as illustrations of unfavorable influence, the answer may be given that modern sanitation and preventive medicine have afforded city communities much greater immunity to the potential dangers of contagion than exists in the farm community. Such things as drainage, water analysis, clinical facilities and the periodic and regular examination of school children have entered far deeper into the life of the city community. These are not essentially precluded to the rural area—they simply have not yet been developed there to so large an extent. That they will do so depends upon the program of education which farseeing individuals and agencies undertake to sponsor.

12. INSURANCE OF LIFE AND HEALTH

Investment in insurance is more prevalent among city families than among farm families. It does not appear that the desirability for insuring against the contingency of sickness and death is less pressing in the case of farm families. The explanation must lie in large measure in the fact that the field of insurance has not been developed intensively among rural groups. It is possible, too, that certain antipathies still prevail against the principle of insurance—ideas which we are coming to recognize as fallacious. There is, of course, the fact that the farm family does not find itself in quite such distressing circumstances financially in ill-health and the contingency of death. The

farm stands as a security and present fund, or evidence of value which absorbs the immediate shock of physical misfortune. With the average city family this is not so true and thus insurance provides against sudden breaks in the earning capacity of the family.

The data obtained from city families reveal that the poor group averages annual premium payments for insurance amounting to \$49, the intermediate group \$78, and the prosperous group \$539. Farm families average considerably less in such payments; poor families \$3, intermediate \$25, and prosperous \$182. As a percentage of total living costs, the city families of the poor group average 5.02, the intermediate 4.01 and the prosperous 7.96.

In the discussion of insurance among farm families it was recognized that since many of the families had no insurance at all the average for the group was thereby lowered considerably. Accordingly, the data were arranged so as to indicate the extent of insurance costs for only those families who reported for this item. We are able to do the same with the data on city families. Table 39 which follows sets forth the results of the tabulations for both city and farm families.

TABLE 39
EXTENT OF INVESTMENT IN INSURANCE BY CITY AND FARM FAMILIES

| | Per cent of families owning insurance | | Annual average premium | |
|--------------------|--|------|---------------------------|----------|
| | City | Farm | City | Farm |
| Poor | 91.5 | 10.0 | \$ 53.58 | \$ 31.10 |
| Intermediate | 93.5 | 38.7 | 83.92 | 64.80 |
| Prosperous | 96.3 | 75.0 | 560.03 | 242.77 |

It is observed that the differences between the city and farm groups on the basis of those who own insurance are not so great as when the average is struck with those included who do not own insurance. The explanation, of course, lies in the fact that a much smaller percentage of farm families enter into insurance contracts. It appears that over ninety per cent of all the families in the city held some form of life or health insurance.⁹

9. In some instances the family insurance was represented as a special saving by the family against the contingency of sickness or death and not in the form of policy holdings with insurance companies.

13. ADVANCEMENT AND RECREATIONAL COSTS

Some idea of the extent to which different social groups subscribe to activities which in the broader sense are cultural, and which provide for advancement as recreation may be had from an examination of the costs reported by them.

TABLE 40
EXPENDITURES FOR ADVANCEMENT AND RECREATION IN
CITY AND FARM FAMILIES

| | Amount | | Per cent of total living costs | |
|--------------------|----------|----------|--------------------------------|------|
| | City | Farm | City | Farm |
| Poor | \$ 38.31 | \$ 20.30 | 3.92 | 2.28 |
| Intermediate | 128.20 | 81.41 | 6.55 | 4.73 |
| Prosperous | 1,002.26 | 297.79 | 14.81 | 7.29 |

Both in absolute amount and relatively the city families spend more heavily for cultural things. In both country and city, the amount spent increases as we progress from the poor to the prosperous families and the percentage of the total budget which these items claim increases likewise.

The purposes for which these expenditures are made differ between the social groups and between the farm and city families. Table 41 indicates the percentages of all advancement and recreation costs which are spent within the home and those which are spent outside. The first type consists of such items as papers, magazines and

TABLE 41
PERCENTAGE OF EXPENDITURES FOR ADVANCEMENT AND RECREATION WITHIN
AND OUTSIDE THE HOME

| | Percentage of all advancement and recreation costs | | Percentage of total living costs | |
|--------------------|--|------|----------------------------------|------|
| | City | Farm | City | Farm |
| Poor | | | | |
| Within home | 32.8 | 27.6 | 1.28 | 0.63 |
| Outside home | 67.2 | 72.4 | 2.64 | 1.65 |
| Intermediate | | | | |
| Within home | 27.5 | 31.5 | 1.80 | 1.49 |
| Outside home | 72.5 | 68.5 | 4.25 | 3.24 |
| Prosperous | | | | |
| Within home | 30.7 | 21.0 | 4.54 | 1.53 |
| Outside home | 69.3 | 79.0 | 10.26 | 5.76 |

books, music lessons, radios, and other instruments or devices for entertainment within the home; the latter comprises items such as club and organization dues, concerts and lecture courses, movies, fairs, church, charity, vacation trips, ball games, etc.

It is observed that roughly from one-fifth to one-third of the expenditures are made for activities within the home while from four-fifths to two-thirds represent costs for items outside the home. Differences between farm and city families are not great. The widest spread occurs in the prosperous group, where city families spend 30.7 per cent of their advancement and recreation fund on activities within the home, while the farm group spends only 21.0 per cent.

Contributions to the church and charity account for a substantial part of the costs in the enumeration of cultural activities. Table 42 demonstrates the amount reported for such contributions by each of the groups and gives their relationship to the total advancement and recreation costs and to the total living costs.

TABLE 42

CONTRIBUTIONS BY CITY AND FARM FAMILIES TO THE CHURCH AND FOR CHARITY
AND THE RELATIONSHIP OF THESE TO THE LIVING COSTS

| | Amount contributed | Percentage of total costs reported for ad- vancement and recreation | Percentage of total living costs |
|--------------|-----------------------|---|--|
| Poor | | | |
| City | \$ 18.18 | 47.5 | 1.86 |
| Farm | 9.15 | 45.1 | 1.03 |
| Intermediate | | | |
| City | 45.52 | 35.5 | 2.32 |
| Farm | 29.27 | 35.9 | 1.70 |
| Prosperous | | | |
| City | 371.29 | 37.1 | 5.48 |
| Farm | 124.54 | 41.8 | 3.05 |

Poor families in both city and county contribute proportionally more out of their total advancement and recreation fund for the church and charity than do the intermediate and prosperous families. While their absolute contributions are substantially smaller they nevertheless indicate greater liberality than is shown for the other groups. Moreover, the intermediate farm group is surpassed by the poor city group in the percentage of the total budget which goes for the church and charity. In the case of each group the city families exceed in the

percentage of the total budget by which they contribute for these items.

The costs of reading matter show an interesting variation as between the several groups in city and farm families. The following table (see Table 43) reveals that city families spend more than farm families for newspapers, magazines and books. This is something to provoke thought in view of the fact that the city affords opportunities for free reading that do not exist for the average farm family.

TABLE 43
AMOUNT SPENT FOR READING MATTER BY CITY AND FARM FAMILIES

| | Amount | Per cent of all costs for advancement and recreation | Per cent of total family living costs |
|--------------|---------|--|---------------------------------------|
| Poor | | | |
| City | \$ 7.01 | 18.3 | 0.72 |
| Farm | 4.49 | 22.1 | 0.50 |
| Intermediate | | | |
| City | 10.68 | 8.3 | 0.55 |
| Farm | 10.63 | 13.1 | 0.62 |
| Prosperous | | | |
| City | 50.70 | 5.0 | 0.75 |
| Farm | 33.04 | 11.1 | 0.81 |

But if the city families average a higher dollar expenditure for reading matter, the farm families show a higher percentage of their total advancement and recreation costs attributable to reading matter, and, in the case of the intermediate and prosperous families a higher proportion of their total family living costs.

The question of time spent in reading and other cultural influences is considered in the succeeding chapter on social and environmental factors.

We come now to a discussion of the last item of the budget of the average family, embracing those expenditures which are in large measure cultural and which make for social uplift. These appear last in spite of their great importance, and because with a large part of the population, the items entering into this category are conditioned first upon the satisfying of the prime wants of life. Existence of a sort must in any event be accomplished before outlays for recreational and cultural activities can be sanctioned.

The city specializes in the provision for entertainment and the accompanying relaxation. It commercializes the need of man in this respect and ordinarily supplies him in his want only at a cost. When private agencies do not monopolize the field, government often takes steps to fill the human need and the result is that we have public playgrounds, parks, auditoriums with speakers and entertainers supplied through municipal sources, museums and art galleries. If the individual making use of these facilities does not pay directly in fees for the benefits as he receives them, the costs are ultimately borne by the group in taxes if they are supplied by governmental agency. Philanthropy has worked to better the position of man when it has taken the form of bequests or donations for such activities as provide for a wholesome stimulus of the body and mind, or uplift through an attempt to develop appreciation of the aesthetic.

The extent of development for such human needs has not occurred among rural groups in the degree which has characterized this development in urban areas. Farm families have been in times past more independent of commercialized entertainment and cultural relationships. Intimate human contacts prevailed in all activities entered into for recreation and the spirit was that of neighborly cooperation on such occasions as church affairs, entertainments, dances, housewarmings, harvest gatherings and the like. These closer intimacies appear to be breaking down with the breakdown of physical or geographic isolation of the farm. Towns are quickly accessible with the urban forms of entertainment and amusement. The youth of the farm is attracted thereby and the result is seen in the tendency toward dependence upon commercial forms of recreational activities.

CHAPTER V

Social and Environmental Factors

1. INTRODUCTORY STATEMENT

WE HAVE clearly seen how the scientific analysis of expenditures of families in different social and economic groups tends to support the inferences of common judgment after a surprising fashion. Our data on expenditures have revealed only the strength of the economic factors as expressive of variations in the manner and method of life among the various strata of the population. Other criteria suggest themselves as indices of cause or of effect or which are at the same time sufficiently complex to be both cause and effect. And so, as in the discussion of farm families, we shall attempt in the present chapter to present and interpret wherever possible, our findings on these other factors, and compare in a general way the city aspects with those prevailing among farm families.

2. NUMBER OF CHILDREN IN CITY FAMILIES

Our figures show for city families in each group a smaller average number of living children per family than for any of the farm groups. Table 44 following indicates the number of children in city families who are living at home and those living away from home.

TABLE 44
NUMBER OF CHILDREN IN CITY AND FARM FAMILIES

| | Average number living City Farm | | Average number living at home City Farm | | Average number living away from home City Farm | |
|--------------------|--|------|--|------|--|------|
| | City | Farm | City | Farm | City | Farm |
| Poor | 2.5 | 3.6 | 2.4 | 2.1 | 0.1 | 1.5 |
| Intermediate | 3.0 | 4.3 | 2.6 | 2.4 | 0.4 | 1.9 |
| Prosperous | 3.1 | 4.2 | 2.5 | 2.5 | 0.6 | 1.7 |

The poor city group in this study shows smaller average families than the intermediate and prosperous groups largely for the same reasons as were ascribed to the similar situation existent among farm families. First, the data here consider only living children and take no account of infant mortality. Again the age of the family differs among the groups, the poorer families showing a larger proportion of

families whose age is 10 years and less than either of the other groups. Table 45 indicates this feature.

TABLE 45
AGE OF CITY AND FARM FAMILIES

| | Showing the percentage of the total families of this study found in each age group | | | | Total |
|--------------|---|------------------------------------|----------------------|------------------|-------|
| | 10 years and less | 11 to 15 years (both inclusive) | 15 years and less | Over 15 years | |
| Poor | | | | | |
| City | 45.7 | 5.7 | 51.4 | 48.6 | 100 |
| Farm | 28.2 | 12.8 | 41.0 | 59.0 | 100 |
| Intermediate | | | | | |
| City | 28.2 | 25.6 | 53.8 | 46.2 | 100 |
| Farm | 12.9 | 15.3 | 28.2 | 71.8 | 100 |
| Prosperous | | | | | |
| City | 18.5 | 22.2 | 40.7 | 59.3 | 100 |
| Farm | 8.3 | 8.3 | 8.3 | 91.7 | 100 |

From Table 45 we see that city families are younger than farm families according to the corresponding groups. We observe also that poor families in both the city and farm groups have a higher percent-

TABLE 46
COMPARISON OF NUMBER OF YEARS BETWEEN BIRTH IN CITY AND FARM FAMILIES OF DIFFERENT AGES ¹

| | Years between birth of children for families whose age is of: | | | |
|-------------------------|--|------------------------------------|---------------------|-----------------|
| | 10 years or less | 11 to 15 years (both inclusive) | 15 years or less | All families |
| Poor | | | | |
| City | 2.7 | 4.6 | 2.9 | 4.9 |
| Farm | 3.3 | 3.6 | 3.5 | 6.4 |
| Intermediate | | | | |
| City | 3.4 | 4.6 | 4.0 | 5.4 |
| Farm | 3.9 | 4.3 | 4.2 | 5.6 |
| Prosperous | | | | |
| City | 4.6 | 4.6 | 4.6 | 6.5 |
| Farm ² ..... | .... | .... | .... | 7.2 |

1. These figures are based on number of children now living.

2. Prosperous families of the farm group had a family age of over 15 years for all but one family. Hence the results of a tabulation of this family would be misleading and the detail is therefore omitted. For the sake of clearness it should be stated that by the "age of the family" is meant the number of years since the parents, operator and homemaker were married.

age of younger families, while the higher percentages for the prosperous group fall to those families whose marital age is over 15 years.

An interesting picture is presented in Table 46 which works out for city and farm families the average years between births in the several groups.

This and the preceding table make clear the reason for a smaller average family for the poor than for the other group. The poor group has a larger number of younger families. If we examine those families whose age is 10 years and less we observe that the poor city families average a child every 2.7 years, and poor farm families every 3.3 years. Intermediate city and farm families of 10 years of age and less average a birth every 3.4 and 3.9 years respectively, while prosperous city families of the same age average a child every 4.6 years.³

It is thus apparent that poor families are larger in reality than prosperous families under this basis of computation. If we had in hand data regarding the mortality among the children of the families in the several groups our picture would be more nearly complete.

3. EDUCATIONAL ATTAINMENT IN CITY FAMILIES

We have intimated previously that one of the features of city life arguing for its favor in comparison with farm life was the system of education. However much our sentimental minds may cherish the recollection of the "little red schoolhouse," our practical minds must come to the fore with the ready admission that many adverse aspects attach to its existence.

The city has been foremost in providing for educational facilities. Here we have found the greatest advances in facilities for housing and for the safety and comfort of school children. Here also do we find the best developed courses of study and more adequate facilities in teaching. These things are more easy of attainment in concentrated populations where the educational needs of thousands may be served within the radius of one or two miles. Not so easily are these advantages made available to the countryside where population is dispersed more widely. Improvement in this direction is coming for the farm area but it is unlikely that it can ever excel the predominating advantage of education afforded by the city community. Consolidation of schools in rural areas is an evidence of the movement.

Let us see in what measure educational attainment is demonstrated

3. See second footnote to preceding table.

among the different city groups and attempt to establish also the relationship between the accomplishment of city families and farm families.

TABLE 47
AVERAGE NUMBER OF YEARS OF FORMAL SCHOOLING FOR PARENTS AND
CHILDREN IN VIRGINIA CITY FAMILIES

| | Poor | Intermediate | Prosperous |
|-----------------------------|------|--------------|------------|
| Husband | 7.0 | 7.8 | 12.5 |
| Wife | 6.2 | 7.9 | 11.6 |
| Children ⁴ | 6.7 | 8.7 | 11.0 |

Education in poor families shows the husband or father as having acquired more formal schooling than the wife or the children. We may judge from the figures that the maximum average education was not beyond the elementary grade for either the husband, wife or children. The wife received the lowest average number of years of formal schooling. Reference to Table 23 showing similar data for the farm families gives a different arrangement of educational attainment in poor families. Here the husband had least—5 years—which is two years below that of the city husband. Poor farm children averaged 7.3 years as compared with the city figure of 6.7 years. Poor farm wives reported 5.9 years and city wives 6.2 years.

Intermediate city families show consistently better in years of formal schooling than the poor families. In this group the children show the highest attainment with an average of 8.7 years, or about the second year of high school. Husbands and wives are about equal in schooling with approximately 8 years of formal schooling. Comparison with the figures in Table 23 reveals that the accomplishment of city and farm children of the intermediate group is about the same—8.7 years and 8.9 years, respectively. City husbands and wives of this group average more than a year greater of schooling than the corresponding farm group.

With the prosperous families the years of schooling leap far ahead of the other groups. Husbands in these families average 12.5 years or the equivalent of the second year of college training, which is in

4. Children herein considered are 15 years of age and over. It appears that of these, 10.5 per cent of the poor group, 19.6 per cent of the intermediate group and 42.9 per cent of the prosperous group are now attending school.

excess of the attainment of other members of the family, by nearly a year in the case of the wife, by one and one-half years in the case of the children. Children show 11 years as an average attainment. This figure represents roughly completion of the high school training and is appreciably higher than that for the intermediate group but falls one year below the accomplishment of prosperous children in farm families. Husbands and wives of the prosperous group of farm families average from 3 to 4 years less schooling than those of the corresponding group of city families.

Are we to infer from these facts that city children are failing to reap the benefits of the better facilities when we find that in the poor and prosperous groups their years of formal schooling fall below

TABLE 48
EDUCATION
Formal Educational Attainment of City Parents

[illegible]

those of their fathers? It would seem so from these figures. They must not, however, be taken as conclusive. They may with satisfaction be taken as suggestive of a question upon which more light should undoubtedly be shed.

In Table 48 a more complete analysis is presented to show the formal schooling of the parents in the several groups of city families. This analysis shows the number and percentage of both the operator and homemaker in each group who completed the various grades from elementary through college. In all the families studied in the city there were only two individuals (and these in the intermediate group strangely enough) who reported no formal schooling. Among farm families, as may be recalled from Table 24, several individuals in both the poor and intermediate groups had received no formal educational training (see Table 48).

A higher percentage of the parents in poor families completed elementary schooling in the city than on the farm. In the intermediate group the number completing grammar school varied but slightly. The higher educational attainment of parents in prosperous city families embraced a much larger percentage of the total number of parents than was found for farm families. Thirty-seven per cent of the parents in the city group reported the completing of college training while only 4.2 claimed this in the farm families. If we combine the number who partly completed college training with those who completed the difference is not so striking. On this basis, 46.3 per cent of the city parents and 29.2 per cent of the farm parents in the prosperous group are found to have entered college. In the poor and prosperous city groups the husbands seem to have completed the more advanced grades in larger numbers while in the intermediate city group it is the wives who predominate in number for this attainment. Among farm families the wives in both the poor and intermediate groups and the husbands in the prosperous groups reached the more advanced grades in slightly larger numbers.

An analysis of the educational attainment of the children in city families of each of the groups is presented in Table 49. In all save the prosperous group it appears that larger numbers of the children reach the more advanced grades in school. This feature was true for all the groups in farm families. Higher percentages of the poor farm children than of the poor city children reach the more advanced grades while among the intermediate families the differences in this respect are hardly worth mentioning.

TABLE 49

PERCENTAGE DISTRIBUTION OF CHILDREN FIFTEEN YEARS OF AGE AND OVER IN VIRGINIA CITY FAMILIES ON BASIS OF EDUCATIONAL ATTAINMENT

| | Per cent | Poor Cumulative per cent | Intermediate Per cent | Intermediate Cumulative per cent | Prosperous Per cent | Prosperous Cumulative per cent |
|---------------------------------------|----------|--------------------------|-----------------------|----------------------------------|---------------------|--------------------------------|
| Now in school | 10.6 | ..... | 19.5 | ..... | 42.9 | ..... |
| Schooling completed .. | 89.4 | ..... | 80.5 | ..... | 57.1 | ..... |
| Children whose schooling is completed | | | | | | |
| College (graduated) .. | ..... | ..... | 2.9 | 2.9 | 21.4 | 21.4 |
| College (not graduated) | 5.9 | 5.9 | 7.2 | 10.1 | 21.4 | 42.8 |
| High school (graduated) ..... | ..... | 5.9 | 17.1 | 27.2 | 14.3 | 57.1 |
| High school (not graduated) | 5.9 | 11.8 | 32.8 | 60.0 | 17.9 | 75.0 |
| Grammar school (graduated) | 23.5 | 35.3 | 25.7 | 85.7 | 25.0 | 100.0 |
| Grammar school (not graduated) | 64.7 | 100.0 | 14.3 | 100.0 | ..... | ..... |
| Total | 100.0 | ..... | 100.0 | ..... | 100.0 | ..... |

Children of the prosperous city families are somewhat below those of the corresponding farm families in the numbers who attain the higher grades.

TABLE 50

OCCUPATIONAL STATUS OF PARENTS IN CITY FAMILIES

| | Poor | Intermediate | Prosperous |
|---------------------------------|-------|--------------|------------|
| Unskilled | 3 | 4 | .... |
| Semi-skilled | 29 | 22 | .... |
| Skilled | 3 | 33 | 2 |
| Business and professional ..... | .... | 19 | 25 |
| Total | 35 | 78 | 27 |
| <i>Percentage Distribution</i> | | | |
| Unskilled | 8.6 | 5.1 | ..... |
| Semi-skilled | 82.8 | 28.2 | ..... |
| Skilled | 8.6 | 42.3 | 7.4 |
| Business and professional ..... | ..... | 24.4 | 92.6 |
| Total..... | 100.0 | 100.0 | 100.0 |

4. OCCUPATIONAL STATUS OF CITY FAMILIES

a. Occupations of Parents

Classification of the occupational status of the principal income earners in city families of the several groups sheds additional light upon the question of living standards. In the accompanying tables are shown the several economic groups whose individual members have been classified according to the nature of work performed ranging from unskilled labor to business and professional.

The first part of Table 50 indicates the number of individuals found in each of the occupational groupings while the lower section gives the percentage distribution on this basis of families studied. Thus in the 35 families of the poor group three were engaged in labor whose nature might be designated "unskilled," and this number represented 8.6 per cent of the entire group. It is clear that workers in the poor families are found engaged predominantly in the semi-skilled and unskilled occupations to which they contribute somewhat over 90 per cent of their number. Intermediate family income earners occupy in largest number the skilled occupations though a fair number of semi-skilled on the lower side and a nearly equal number on the upper side of the skilled workers are found as well. Business and professional occupations are entered into by approximately one-fourth of the intermediate families and by more than nine-tenths of the prosperous families. In this highest group we find the division of occupations occupying only two grades, in fact,—business and professional and skilled.

b. Occupational Status of Children

In three accompanying tables are to be seen the occupational distributions of the children of city families, according to the same classification as was applied in the case of farm children. The meagreness of the sample leaves more to be desired in the way of sufficient data for presenting definite conclusions. These shortcomings are admitted despite the fact that the results are in support of our common judgment and tend to give further credence to the ideas which were developed in the sections preceding.

These findings are presented for what they are worth and not with any pronouncement of their indisputable application to the entire population of an urban area (see Table 51).

One striking feature of Table 51 which considers the status of

TABLE 51
OCCUPATIONAL STATUS OF CHILDREN OF CITY FAMILIES 15 YEARS OF AGE AND
OVER LIVING AT HOME

| | Poor | | | Intermediate | | | Prosperous | | | | | |
|--------------------------------|-------|-------------|-------|-------------------------------|-------|-------------|------------|-------------------------------|-------|-------------|-------|-------------------------------|
| | Male | Fe- male | Total | Average years in school | Male | Fe- male | Total | Average years in school | Male | Fe- male | Total | Average years in school |
| Now attending school..... | 1 | ... | 1 | 6.0 | 4 | 12 | 16 | 9.7 | 6 | 5 | 11 | 10.2 |
| Unskilled..... | 2 | ... | 2 | 6.0 | ... | ... | ... | ... | ... | 1 | 1 | 7.0 |
| Semi-skilled..... | 3 | 6 | 9 | 6.6 | 11 | 9 | 20 | 7.4 | 1 | 2 | 3 | 8.0 |
| Skilled..... | ... | ... | ... | ... | ... | 1 | 1 | 13.0 | ... | ... | ... | ... |
| Business and professional..... | 1 | ... | 1 | 7.0 | 5 | 11 | 16 | 9.9 | 2 | 2 | 4 | 11.5 |
| Homemaker..... | ... | ... | ... | ... | ... | 1 | 1 | 7.0 | ... | ... | ... | ... |
| Helping in home..... | ... | 1 | 1 | 6.0 | ... | 2 | 2 | 8.5 | ... | 3 | 3 | 11.7 |
| Total..... | 7 | 7 | 14 | 6.4 | 20 | 36 | 56 | 8.9 | 9 | 13 | 22 | 10.2 |
| <i>Percentage Distribution</i> | | | | | | | | | | | | |
| Now attending school..... | 14.3 | ... | 7.1 | ... | 20.0 | 33.3 | 28.6 | ... | 66.7 | 38.5 | 50.0 | ... |
| Unskilled..... | 28.6 | ... | 14.3 | ... | ... | ... | ... | ... | ... | 7.7 | 4.5 | ... |
| Semi-skilled..... | 42.8 | 85.7 | 64.4 | ... | 55.0 | 25.0 | 35.7 | ... | 11.1 | 15.4 | 13.6 | ... |
| Skilled..... | ... | ... | ... | ... | ... | 2.8 | 1.8 | ... | ... | ... | ... | ... |
| Business and professional..... | 14.3 | ... | 7.1 | ... | 25.0 | 30.6 | 28.6 | ... | 22.2 | 15.4 | 18.3 | ... |
| Homemaker..... | ... | ... | ... | ... | ... | 2.8 | 1.8 | ... | ... | ... | ... | ... |
| Helping in home..... | ... | 14.3 | 7.1 | ... | ... | 5.5 | 3.5 | ... | ... | 23.0 | 13.6 | ... |
| Total..... | 100.0 | 100.0 | 100.0 | ... | 100.0 | 100.0 | 100.0 | ... | 100.0 | 100.0 | 100.0 | ... |
| Average age..... | ... | ... | ... | 19.5 | ... | ... | ... | 19.2 | ... | ... | ... | 21.5 |

children living at home who are 15 years of age and over, is the relatively small number who are in school in the poor group. Of the children reported in these families in this age group only one is now attending school. In the intermediate group 28.6 per cent and in the prosperous group 50 per cent are reported as now attending school. The average age for each of the three groups is noted at the foot of this table. Semi-skilled and unskilled labor engage the time of three-fourths of the children of the poor group, slightly more than one-third of the intermediate group and one-sixth of the prosperous group (see Table 51).

Table 52 gives the status of children 15 years of age and over who are no longer living at home. Many of these are married and supporting homes of their own but they are still comparatively young as a group. The percentages shown for the poor group are misleading if considered alone because of the small numbers which they represent. In the intermediate and prosperous group the numbers are larger. The prosperous group shows a comparatively large percentage still in attendance at school. Those appearing opposite the designation "home maker" are married and set up in their own homes.

The consolidation of Tables 51 and 52 (see Table 53) gives a picture of all the children 15 years of age and over. This is more informative since the number of instances which serve as a basis for the percentage relationships are considerably larger than in either of the other two accompanying tables. Children attending school increase in number from poor to prosperous families. Unskilled occupations take a much larger percentage of the children of poor families. Semi-skilled and skilled rate high in the intermediate group as does also the business and professional class. In the prosperous families the children who are now engaged in occupations other than attendance at school are found most numerous in business and professional work.

Education is obviously a limiting factor in the occupational achievement of children. We observed this also in the discussion of the children of farm families and the general conclusions there drawn are quite as applicable as a close to the present chapter.

5. CULTURAL AND RECREATIONAL ACTIVITIES

a. Length of Working Day

At least one noticeable improvement has occurred in the life of city families in recent years. The length of the working day has been shortened considerably, thus permitting of a greater amount of

TABLE 52
OCCUPATIONAL STATUS OF CHILDREN OF CITY FAMILIES 15 YEARS OF AGE AND
OVER NOT LIVING AT HOME

| | Poor | | | Intermediate | | | Prosperous | | |
|--------------------------------|-------|-------------|-------------------------------------|--------------|-------------|-------------------------------------|------------|-------------|-------------------------------------|
| | Male | Fe- male | Average years in Total school | Male | Fe- male | Average years in Total school | Male | Fe- male | Average years in Total school |
| Now attending school..... | 1 | ... | 1 13.0 | 1 | ... | 1 12.0 | 6 | 4 | 10 12.6 |
| Unskilled..... | ... | ... | ... | 4 | ... | 4 4.8 | ... | ... | ... |
| Semi-skilled..... | 1 | ... | 1 6.0 | 4 | ... | 4 7.8 | 1 | 1 | 2 8.0 |
| Skilled..... | ... | ... | ... | 3 | ... | 3 8.0 | 2 | ... | 2 11.0 |
| Business and professional..... | ... | ... | ... | 2 | 3 | 5 11.4 | 3 | 4 | 7 13.4 |
| Homemaker..... | ... | 3 | 3 6.0 | ... | 14 | 14 8.1 | ... | 6 | 6 9.7 |
| Total..... | 2 | 3 | 7.4 | 14 | 17 | 31 8.3 | 12 | 15 | 27 11.7 |
| <i>Percentage Distribution</i> | | | | | | | | | |
| Now attending school..... | 50.0 | ... | 20.0 | 7.1 | ... | 3.2 | 50.0 | 26.7 | 37.0 |
| Unskilled..... | ... | ... | ... | 28.6 | ... | 12.9 | ... | ... | ... |
| Semi-skilled..... | 50.0 | ... | 20.0 | 28.6 | ... | 12.9 | 8.3 | 6.6 | 7.4 |
| Skilled..... | ... | ... | ... | 21.4 | ... | 9.7 | 16.7 | ... | 7.4 |
| Business and professional..... | ... | ... | ... | 14.3 | 17.6 | 16.1 | 25.0 | 26.7 | 26.0 |
| Homemaker..... | ... | 100.0 | 60.0 | ... | 82.4 | 45.2 | ... | 40.0 | 22.2 |
| Total..... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Average age..... | ... | ... | 22.0 | ... | ... | 27.7 | ... | ... | 26.9 |

TABLE 53
OCCUPATIONAL STATUS OF ALL CHILDREN OF CITY FAMILIES 15 YEARS OF AGE
AND OVER

| | Poor | | | Intermediate | | | Prosperous | | |
|--------------------------------|------|-------------|-------------------------------------|--------------|-------------|-------------------------------------|------------|-------------|-------------------------------------|
| | Male | Fe- male | Average years in Total school | Male | Fe- male | Average years in Total school | Male | Fe- male | Average years in Total school |
| Now attending school..... | 2 | ... | 2 | 5 | 12 | 17 | 12 | 9 | 21 |
| Unskilled..... | 2 | ... | 2 | 3 | ... | 3 | ... | 1 | 1 |
| Semi-skilled..... | 4 | 6 | 10 | 16 | 9 | 25 | 2 | 3 | 5 |
| Skilled..... | ... | ... | ... | 3 | 1 | 4 | 2 | ... | 2 |
| Business and professional..... | 1 | ... | 1 | 7 | 14 | 21 | 5 | 6 | 11 |
| Homemaker..... | ... | 3 | 3 | ... | 15 | 15 | ... | 6 | 6 |
| Helping in home..... | ... | 1 | 1 | ... | 2 | 2 | ... | 3 | 3 |
| Total..... | 9 | 10 | 19 | 34 | 53 | 87 | 21 | 28 | 49 |
| <i>Percentage Distribution</i> | | | | | | | | | |
| Now attending school..... | 22.2 | ... | 10.5 | 14.7 | 22.6 | 19.6 | 57.2 | 32.2 | 42.9 |
| Unskilled..... | 22.2 | ... | 10.5 | 8.8 | ... | 3.5 | ... | 3.6 | 2.0 |
| Semi-skilled..... | 44.5 | 60.0 | 52.6 | 47.1 | 17.0 | 28.7 | 9.5 | 10.7 | 10.2 |
| Skilled..... | ... | ... | ... | 8.8 | 1.9 | 4.6 | 9.5 | ... | 4.1 |
| Business and professional..... | 11.1 | ... | 5.3 | 20.6 | 26.4 | 24.1 | 23.8 | 21.4 | 22.5 |
| Homemaker..... | ... | 30.0 | 15.8 | ... | 28.3 | 17.2 | ... | 21.4 | 12.2 |
| Helping in home..... | ... | 10.0 | 5.3 | ... | 3.8 | 2.3 | ... | 10.7 | 6.1 |
| Total..... | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Average age..... | ... | ... | 20.0 | ... | ... | 21.9 | ... | ... | 23.3 |

time available for recreation and personal improvement. Not only has the working day been shortened but the compensation has been extended beyond that of the reward for the efforts of the longer day. And even when we take into account the rise in the cost of living the balance of favor is seen to reside in the interest of the worker.

A most interesting question arises out of this fact as to what extent the families of each economic group have availed themselves of the opportunities afforded in the increase of leisure time. Unfortunately, we have no data carrying back to earlier times upon which to base comparisons with the present. Our present contribution must perforce take the form of a mere presentation of the facts as they were ascertained in the current study. And it may be that they will thus serve as a basis for comparisons of a like sort in studies which follow at a later period.

It has been recognized by authorities generally that the length of the working day has much to do with the standard of living. A leading 19th century philosopher on economic and social questions was Alfred Marshall. His pronouncements on the standard of life are worthy of consideration. In discussing the problem of the relationship of the hours of labor to the standard of life he attempts to describe the effect of a shortening of hours on the income of a whole people (the "national dividend"). Quoting from his discussion:⁵

"When the hours, the nature of the work done, the physical conditions under which it (labor) is done, and the method by which it is remunerated, are such as to cause great wear-and-tear of body or mind or both, and to lead to a low standard of living; when there has been a want of that leisure, rest and repose, which are among the necessities for efficiency; then the labour has been extravagant on the part of the individual capitalist to keep his horses or slaves overworked or under-fed. In such a case a moderate diminution of the hours of labour would diminish the national dividend only temporarily; for as soon as the improved standard of life had had time to exert its full effect on the efficiency of the workers, their increased energy, intelligence and force of character would enable them to do as much as before in less time; and thus, even from the point of view of material production, there would be no ultimate loss, any more than there would be in sending a sick worker into a hospital to get his strength renovated. The coming generation is interested in the rescue of men, and still more in that of women, from excessive work;

5. Principles of Economics, Book VI, Chapter XIII, 3.

TABLE 54
UTILIZATION OF TIME OF VIRGINIA CITY FAMILIES

| | Hours in working day | Hours spent in reading per week | Regular visiting in community per month | Trips to town by family per month | Trips for pleasure or rest per year | Entertainment At home Away from home |
|-------------------|----------------------------|---------------------------------------|---|---|---|--|
| Poor..... | 9.3 | 4.7 | 5% none at all 70% average once 25% average twice or more | 3.1 times | 94% none 6% one | 64% rarely 24% occa- sionally 15% fre- quently |
| Intermediate..... | 8.9 | 6.7 | 15% none at all 43% average once 42% average twice or more | 5.6 times | 51% none 37% one 12% two or more | 45% rarely 36% occa- sionally 19% fre- quently |
| Prosperous..... | 7.1 | 12.8 | 21% average once 79% average twice or more | Irregular and not measurable from data | 19% none 44% one 37% two or more | 4% rarely 33% occa- sionally 63% fre- quently |

at least as much as it is in the handing down to it of a good stock of material wealth."

This sane and practical view out of the mind of a profound theorist is deserving of recognition.

Poor families in this study reported the principal wage-earner as employed on an average of 9.3 hours daily for five days in the week and 4.5 hours on Saturday, with Sunday generally free. Intermediate families averaged 8.9 hours on the same basis and prosperous families 7.1 hours. The labor of the lower group is predominately of a physical sort while that of the upper group is primarily mental, the intermediate group being of both sorts.

It is apparent that none of the groups as a whole suffers from inordinately long hours at work, though individual cases might be found where this is so.

While the working day of the farmer averages somewhat higher than that for the city worker, the two groups are not altogether comparable in this respect. In the first place the nature of the work is fundamentally different, most of the farmer's labor being done outdoors where he has the advantage of fresh air all the time. Moreover, the conditions under which the city worker labors have psychological aspects which in large measure justify a shorter day. One would hardly venture the assertion that one or the other group works harder in view of these essential differences. This much may be said, however, that the physical needs of the farmer are pretty fully met by virtue of his occupational activities and his leisure time can be applied more specifically to spiritual and mental improvements. Not so in the case of great numbers of city workers who must need attend to both physical and mental recreations out of the leisure hours of which they find themselves possessed.

b. Time Spent in Reading

Wide variations in time devoted to reading occur between the different groups in the city. Poor families spend only 4.7 hours in reading while intermediate families spend 6.7 hours and prosperous families 12.8 hours.⁶ Among poor families the reading consists almost wholly in the daily newspaper; the intermediate group reads primarily from this same source but one finds the infiltration of ideas gleaned from other reading. Prosperous families enjoy all types of

6. The number of hours here shown are the combined time of the husband and wife devoted to reading.

reading matter but our data do not indicate as much time devoted to reading as might be expected within this group.

Farm families exceed in each group the corresponding city group in time spent in reading, with poor farm families reading about as much as intermediate city families and with prosperous farm families spending over 50 per cent more time in reading than city families of the same group.

c. Visiting in Community

In visiting among friends the differences between the several groups are quite as divergent as in the matter of reading. Reference to Table 54 indicates that while most of the families do some visiting, it is among the upper group families that most frequent and regular visiting is done. Among farm families the differences were not noticeable in this respect where all three groups reported an approximately alike amount of visiting.

Prosperous city families report more time for visits for pleasure and rest than either of the other city groups. Over two-thirds of these families average two or more such visits per year. Among poor families over nine-tenths report no visits of this nature whatsoever. Farm families on the whole enjoy more of this form of recreation than city families, except in the intermediate group where it appears that city families slightly exceed the corresponding groups of farm families.⁷

d. Entertainment

One might expect that among city families much more entertainment would be experienced outside the home than inside. Yet our findings on the whole tend to the inference that a considerable amount of the recreation of a lighter sort is experienced by the family with friends at home. It will be recalled that reference was made to the tendency in farm families to avail themselves of those forms of recreational activity for which a charge was made. It appears in the comparison of farm and city families that the differences in the frequency of such recreational forms are not great for the respective groups of families.

We wish to propose no ideal set-up which should be applied to the utilization of leisure time among city families. Desirable changes

7. For detailed comparison in this connection reference should be made to Table 29 preceding.

could be effected if the inclinations of people could be changed as easily as the plans for improvement.

It appears for example that all groups of city families could profitably devote more time to reading than the record shows. For the poor families educational limitations are some evidence in extenuation of the meagreness of time spent in reading, but in the intermediate group as a whole no such barrier is found and it is largely a matter of inclination. The same is even more true for prosperous families.

6. ENVIRONMENTAL FACTORS IN CITY LIVING STANDARDS

Environment conditions the life of the individual though we may not state with exactness the scope of its influence. To what extent surroundings are a limiting factor is incapable of measurement, yet we are assured through observation that what constitutes our daily contact somehow becomes ingrained in our mentalities so that we seem to absorb the atmosphere of that which is about us. We are "out of place" in another setting. Individuals may be found who are capable of adjustment to essentially different environments, and we find others who seem never to have been destined for the environments into which they were born. So that we may by no means speak of impossibility of a migration from one type of social environment to the other. Our generalization must, therefore, be less pronounced and accordingly we venture only to maintain that environment at a given time affords a fair idea of the economic status of people—that environment betrays the standard of life for different groups, that environment characterizes the social strata within a given geographic area.

Our study of the environmental factors of different social groups within a compact urban area in Virginia reflects the concomitance of environment and financial status. It bears out also the correlation of standards of living with educational attainment and with occupational status.

Of the 35 poor city families visited in this study all inhabited frame dwelling houses. These structures were typically unattractive, of cheap construction, and in most instances, poorly situated. The economy in their construction was apparently too great to permit of even a meagre sort of comfort within, to say nothing of their all too close proximity to each other. Only heroic souls in such environments make an effort at creating evidences of pride and self-respect. And a few of these were encountered.

Family A whose existence depended upon the joint efforts of husband and wife (the wife employed in a factory part of the year) was found living in a setting repulsive to the wife. She longed for a "little place outside of town" where they might "make a garden and have a place for the children to play." They had been living in their present location for six years. The husband was not unwilling to make a change but lacked the initiative to "pull up" and depart from the neighborhood. How many more years it will take to destroy the frustrated hopes of this wishful mother is problematical. The attitude of the husband in this family is typical of the group,—an inertia which deadens the hope of development out of the prevailing status of their existence seems characteristic.

We observed in discussing the items of the budget that there was a deficiency in room space for families of the poor group. With an average of 4.3 persons occupying an average of 3.9 rooms conditions can be wholesome under ordinary circumstances. For if we consider sleeping rooms only it is apparent that a fair minimum would be three rooms where the children in the family are of both sexes. Twenty-four of the thirty-five dwellings of poor families were heated with stoves or open fireplaces and only one was equipped with a central heating system.

Lighting by means of oil lamps was found in 43 per cent of the homes of poor families; the others had either electricity or gas for artificial illumination. Water in the house was universal among this group though the equipment found with it was by no means ideal. Only one-sixth of the houses were equipped with bath facilities. Sewage disposal was by means of the city sewerage system.

As between country and city families the physical conveniences for the family are thus more common in the latter. That the degree of difference in these features favorable to city families may be offset by the psychological features arising out of the sordidness of the poor city areas is quite likely. If the poor farm family lacks certain material evidences of comfort and convenience it may at the same time not feel the pressure of poverty as a social degradation in the sense in which it is borne upon city families.

Poor city families are not devoid of an occasional illustration in things enjoyed by the higher social groups. We find for example that several have telephones and that approximately one-fourth operate automobiles. More than two-fifths of the poor farm families operate automobiles. The judgments entered in the course of our

discussion of poor families and their use of automobiles may be applied with equal force to city families. We would not hazard the denial of concrete benefits accruing from the possession of an automobile to families in any social group. We can justly question, however, the balance of the advantage of the automobile when on the other side we observe insufficiency of housing space, inadequacy of food and other evidences of more imperative need to the physical welfare of the family.

In the intermediate group we find a contrast which is hardly comparable with poor families. While the type of structure continues predominantly frame it is of a much more substantial construction, more desirably located and in a state of repair which has few unattractive features. Moreover, the surroundings—front yard, and lot, if there be one—are better kept and greater orderliness characterizes the physical features of the dwellings.

Room space is more ample with an average of 5.7 rooms for an average of 4.9 individuals. A greater proportion of the houses are equipped with central heating systems—nearly one-third. Less than 3 per cent use oil for illumination, the rest have either gas or electricity—frequently both. Baths are found in nearly nine out of ten of the houses and the appearance of children in the families of this group gives evidence of their use in contrast to the poor. This group enjoys the convenience of the telephone to the extent of two out of every five families and 37 per cent of the families own automobiles.

The physical comforts and conveniences of this group exceed those of the corresponding farm group, and if these constituted the criteria by which to judge of the relative merits of city and farm life the question would not be debatable. Our judgment would perforce fall to favor the city environment as more nearly ideal.

Prosperous city families as a group naturally occupy more pretentious residences in locations which are freest from objectionable features of the city. Of the families studied one-fourth live in dwellings of stone or brick construction. Crowding of houses among this group was strikingly absent in contrast with the lower groups studied. Ample room space within the house more than sufficed for comfort and convenience, with an average of 8.8 rooms for an average household numbering 5. All of the homes were heated by central plants. All had electricity and gas. In fact, none was found without the complete list of conveniences afforded by city life. Eight out of ten families owned automobiles and one family in each seven

had two or more. Telephones were installed universally and few were without the facilities of the radio.

The prosperous city family comes closest to an approximation of physical compensations of farm life. With all the advantages of the urban life, it enjoys a greater freedom in space relationships than either of the other urban groups. But it lacks the more profound influences of the "wide open spaces," which with their defects have also their sterling qualities.

This analysis portrays a picture of what "is":—the authors feel constrained to suggest what "can be." The future has in promise an equalization of the physical handicaps existent in rural life to conform with the advantages offered by the city. Principal among these are (1) the progress of adequate road facilities which will provide year round travel for farm families by means of the automobile, (2) the development of rural school systems to a plane corresponding with the grade of instruction afforded city children, (3) provisions for electrification to all rural areas, and (4) the possibility of the economic installation of septic tanks and modern sewer appliances.

These changes are already in the process of accomplishment, some to a greater degree than others. The ideal is still far from realization; yet we are moving forward and that is the essential need.

CHAPTER VI

Nutritive Value of Foods Consumed by City and Farm Families in Virginia ¹

1. THE TASK AND SAMPLE

IN THE study of the cost of living among farm and urban families of Virginia, information pertaining to the quantity as well as to the cost of the various foodstuffs that go to make up the diet was obtained. Since the information gathered from the housewife was in considerable detail, it seemed feasible to have the food consumption figures analyzed to see to what extent the diet of the families included for study was adequate.

One hundred and thirty-seven farm families and one hundred and forty urban families, representing three living standards groups were included in the analysis. Forty farm families and thirty-five urban families lived on a comparatively low expenditure which averaged about \$930 per year; eighty-five farm families and seventy-eight urban families lived on an intermediate expenditure of approximately \$1,840 per year; and twelve farm families and twenty-seven urban families enjoyed a high expenditure, the average for the farm families being \$4,080 and for the urban families, \$6,770.² The food consumption figures reported here were obtained by the survey method, that is, an agent visited the housewives and obtained from them information pertaining to their food habits during the year 1927-1928.

2. METHOD OF ANALYZING FOOD CONSUMPTION DATA

The analysis of a family's diet to determine the adequacy usually consists of three steps: first, the calculation of the food constituents present in the food; second, an estimate of the nutritive needs of the family under consideration, usually expressed in terms of adult-male units; and third, the comparison of the nutrients available for consumption per adult-male unit with a standard of good nutrition and with results from other studies. This method of analysis was followed in the present study.

1. This analysis was made by Dr. Edith Hawley, Senior Food Economist, Bureau of Home Economics, through the courtesy of the United States Department of Agriculture.

2. The "low" expenditure group is synonymous with the group classified as "poor" elsewhere in the study, while the "high" expenditure and "prosperous" groups are identical.

Food, according to our present knowledge of nutrition, supplies the body with ten or more ash constituents, six unidentified substances called vitamins, and with water, protein, fat, and carbohydrate. The analysis of a diet, however, commonly includes only those factors which can be measured quantitatively and are recognized to be often-times furnished in insufficient amounts in the American diet. In this study the total energy furnished by the fat, carbohydrate, and protein consumed, and the amount of protein, calcium, phosphorus, and iron yielded by the diet were analyzed. For calculating the nutritive value of the food, a short method worked out in the Bureau of Home Economics was used.³

Since the nutritive requirements of individuals vary according to sex, age, and activity, it is customary to allow for differences in consumption by the use of a dietary scale in which the needs of the women and children are expressed in terms of man's requirement. The number of adult-male units in each family was calculated by the use of Hawley's double dietary scale (2, p. 28). The term "adult-male unit," usually expressed as 1.0, refers to the nutritive requirement of a moderately active man weighing 150 pounds. This factor was used for the men included in the urban families, but because of the relatively great activity of adults on the farm, the factor 1.2 was used to express the energy need of the farmers, and instead of the usual factor 0.8, 1.0 was employed for women on the farm. The factors 1.1 and 0.9 were employed respectively to indicate their protein and mineral needs. By the use of the double scale two figures, expressed in adult-male units, are obtained to indicate the family's food requirements, one for the energy need of the family and the other for its protein and mineral needs.

The amount of nutrients available per man is found by dividing the total nutrients yielded by the average family's diet by the estimated number of adult-male units in the family. It is advantageous to express it in this way when the figures are to be compared with standards of good nutrition or with results from other studies. In this investigation Sherman's nutritive standard (3, pp. 541-542), increased 10 per cent to allow for waste, is used for comparison. It may be stated as 3,300 calories, 74 grams of protein, 0.75 gram of calcium, 1.45 grams of phosphorus, and 0.0165 gram of iron per man per day. This may be considered a safe minimum standard for judging the adequacy of the diet.

3. Reference is made by numbers in italics to literature cited, p. 123.

3. FOOD HABITS OF FARM AND URBAN FAMILIES

Table 55 is given to show the differences in the composition of the families and the food costs in the various groups of families. According to it, the average farm family needed food yielding 24 per cent more energy and 4 per cent more protein and minerals than was needed by the average urban family in Virginia. In both city and farm families the average food requirements and the total expenditure for food increased with the expenditure. The proportion of the total budget going for food, on the other hand, tends to decrease as the total expenditure increases.

Examination of the three living standards groups in both farm and city families indicates certain differences of importance to which we may call attention. Energy needs of the poor farm group are 12 per cent greater than for the corresponding city group, while protein and mineral requirements are 10 per cent less. With the intermediate group, energy needs of the farm family are 43 per cent greater than for the city family and protein-mineral needs 13 per cent greater. The average prosperous farm family requires 10 per cent more energy yield in food consumed and about 2 per cent less protein-mineral content than the corresponding city family.

TABLE 55

AVERAGE COMPOSITION OF FAMILIES AND MONEY VALUE OF FOOD AND PROPORTION OF TOTAL BUDGET SPENT FOR FOOD BY 277 FARM AND CITY FAMILIES IN VIRGINIA, ARRANGED ACCORDING TO THREE LIVING STANDARD GROUPS

| Families studied | | Average size of household | | Food | |
|--------------------|--------|---------------------------|-----------------|--|----------------------------|
| | | Energy | Protein mineral | Average value per adult-male unit (energy) | Proportion of total budget |
| Type | Number | Number | Number | Dollars | Per cent |
| Poor group | | | | | |
| Farm | 40 | 3.8 | 3.8 | \$115 | 49 |
| Urban | 35 | 3.4 | 4.2 | 108 | 37 |
| Intermediate group | | | | | |
| Farm | 85 | 5.0 | 5.2 | 135 | 39 |
| Urban | 78 | 3.5 | 4.6 | 161 | 29 |
| Prosperous | | | | | |
| Farm | 12 | 5.4 | 5.3 | 185 | 24 |
| Urban | 27 | 4.9 | 5.4 | 175 | 13 |
| Average* | | | | | |
| Farm | 137 | 4.7 | 4.8 | 134 | 38 |
| Urban | 140 | 3.8 | 4.6 | 150 | 22 |

*Weighted according to number of families.

The food consumed by the urban family costs, on the average, 12 per cent more than that of the farm family. In the high and low expenditure groups, however, the urban diet cost less than the farm family's. Of the total budget a larger proportion was spent for food on the farm than in the city—a relationship which holds throughout in the three living standards levels.

The nutritive value and the adequacy of the food consumed by the families as given in Table 56 were calculated from the figures in Table 57 which shows the average amount of each food consumed. The figures for nutritive value indicate that the average farm family consumes considerably more food than it needed, whereas the average urban family consumes just about enough food to meet its energy and protein needs, but not enough to supply the necessary minerals.

Consideration of the separate groups in farm and city families shows that poor farm families consume more than enough for energy needs and protein requirement by from 31 and 59 per cent respectively, more calcium by 72 per cent, more phosphorus by 38 per cent and more iron by 18 per cent than the normal requirement for good nutrition. Poor city families on the other hand consume barely enough food for energy and protein needs (99 per cent of normal in each instance), and obtain only 55 per cent calcium requirement, 72 per cent of phosphorus need and 84 per cent iron.

The intermediate farm group shows an excess consumption of food even greater than poor farm families as tested by the standard of good nutrition, while prosperous farm families demonstrate equally marked excess over normal needs. The city intermediate families have an excess of energy and protein content in the food they consume but are deficient in calcium, phosphorus and iron by about 15 per cent below normal needs. And prosperous city families are slightly under their energy needs in food consumed, and in phosphorus and iron by from 6 to 8 per cent but are adequately supplied with protein and calcium.

Since the survey method was used in collecting the food consumption figures reported here the results shown in Table 56 are in line with expectations. In an extensive study of food consumption data made by the writer⁴ it was found that the average farm family tends to estimate a consumption of food at least 30 per cent above what it probably uses. The urban family, on the other hand, seems to estimate its food consumption fairly accurately. In both groups the

4. Data in manuscript form, but not yet published.

TABLE 56

COMPARISON OF THE NUTRITIVE VALUE OF 277 FARM AND URBAN FAMILIES IN VIRGINIA WITH A STANDARD OF GOOD NUTRITION, (1) ARRANGED ACCORDING TO EXPENDITURE

| Families studied | Nutritive Value Per Man Per Day | | | | | | | | | |
|----------------------|---------------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| | Energy | | Protein | | Calcium | | Phosphorus | | Iron | |
| | Number | Calories | % of Standard | Grams | % of Standard | Grams | % of Standard | Grams | % of Standard | Grams |
| Poor group | 40 | 4332 | 131 | 118 | 159 | 1.29 | 172 | 2.00 | 138 | .0194 |
| Farm..... | 35 | 3268 | 99 | 73 | 99 | .41 | 55 | 1.04 | 72 | .0138 |
| Urban..... | | | | | | | | | | |
| Intermediate group | 85 | 4681 | 142 | 127 | 172 | 1.48 | 197 | 2.19 | 151 | .0206 |
| Farm..... | 78 | 3746 | 114 | 83 | 112 | .62 | 83 | 1.21 | 83 | .0141 |
| Urban..... | | | | | | | | | | |
| Prosperous group | 12 | 5583 | 169 | 152 | 205 | 1.65 | 220 | 2.59 | 179 | .0246 |
| Farm..... | 27 | 3023 | 92 | 84 | 114 | .78 | 104 | 1.36 | 94 | .0152 |
| Urban..... | | | | | | | | | | |
| Average ² | 137 | 4658 | 141 | 127 | 172 | 1.44 | 192 | 2.17 | 150 | .0206 |
| Farm..... | 140 | 3487 | 106 | 81 | 109 | .60 | 80 | 1.20 | 83 | .0142 |
| Urban..... | | | | | | | | | | |

(1) Standard of good nutrition (with 10% allowance for waste): 3300 calories, 74 grams of protein, 0.75 gram of calcium, 1.45 grams of phosphorus, and 0.0165 gram of iron per man per day.

(2) Weighted according to number of families.

TABLE 57

AVERAGE QUANTITY OF THE VARIOUS FOODSTUFFS CONSUMED BY 137 FARM
AND 140 URBAN FAMILIES IN VIRGINIA, IN POUNDS PER MAN PER YEAR

| Kind of Foodstuff | Food Consumed Per Man Per Year | | | | | |
|--|--------------------------------|-------------------|-----------------|----------------|-------------------|-----------------|
| | Farm Families | | | Urban Families | | |
| | Poor | Inter- mediate | Pros- perous | Poor | Inter- mediate | Pros- perous |
| Meat, fish, eggs | Pounds | | | | | |
| Beef | 10.5 | 15.5 | 37.8 | 13.9 | 17.1 | 22.6 |
| Mutton | .2 | 1.0 | 2.9 | ..... | 1.6 | 8.0 |
| Pork | 135.3 | 154.8 | 181.0 | 45.3 | 71.5 | 41.3 |
| Poultry | 30.7 | 44.1 | 60.4 | 9.2 | 26.5 | 35.5 |
| Veal ..... | ..... | ..... | ..... | 12.0 | 17.0 | 22.0 |
| Fish | 7.1 | 6.8 | 10.2 | 7.9 | 16.2 | 19.4 |
| Eggs | 25.0 | 35.5 | 44.0 | 29.2 | 51.3 | 56.5 |
| Other meat | 5.7 | 1.6 | 2.4 | 6.1 | 7.4 | 4.8 |
| Milk, cream, cheese | | | | | | |
| Whole milk | 623.9 | 739.0 | 779.1 | 80.9 | 258.2 | 301.6 |
| Cream | 9.6 | 26.3 | 20.3 | ..... | 1.0 | 11.0 |
| Cheese | 1.2 | 3.0 | 2.0 | 4.1 | 6.5 | 7.3 |
| Fatty foods | | | | | | |
| Butter | 33.7 | 39.2 | 38.6 | 22.2 | 26.9 | 15.2 |
| Lard | 30.6 | 30.6 | 35.7 | 41.6 | 44.1 | 32.5 |
| Sugar, sirups | | | | | | |
| Honey | 1.8 | 1.9 | 1.5 | .5 | 1.1 | 1.3 |
| Molasses | 7.5 | 8.0 | 3.3 | 7.3 | 3.4 | 2.4 |
| Sugar, white | 75.8 | 82.5 | 99.0 | 49.9 | 76.3 | 74.1 |
| Cereals | | | | | | |
| Bread | 7.7 | 10.4 | 21.9 | 23.9 | 61.7 | 47.6 |
| Cornmeal | 115.2 | 102.9 | 126.8 | 49.2 | 28.3 | 24.7 |
| Flour, white | 232.0 | 232.7 | 218.2 | 223.5 | 199.9 | 116.1 |
| Flour, graham and whole wheat ..... | ..... | ..... | .8 | .1 | .7 | 3.9 |
| Hominy | 1.1 | 1.7 | 2.0 | .2 | .9 | 3.0 |
| Rice | .5 | .3 | 1.2 | 4.4 | 2.5 | 3.2 |
| Rollod oats | 1.8 | 4.5 | 4.3 | 8.5 | 9.2 | 8.7 |
| Other cereals | .3 | .6 | ..... | 2.7 | 5.4 | 3.0 |
| Fruit | | | | | | |
| Apples | 193.2 | 236.6 | 238.0 | 115.8 | 135.6 | 122.3 |
| Berries | 5.5 | 16.0 | 25.6 | 4.3 | 2.3 | 14.2 |
| Melons | 15.1 | 20.3 | 25.3 | 3.7 | 12.3 | 26.7 |
| Peaches | 14.7 | 18.8 | 19.4 | 7.4 | 12.7 | 10.1 |
| Pears | 14.0 | 18.0 | 18.5 | 6.0 | 11.5 | 10.0 |
| Other fresh fruits..... | 15.4 | 19.4 | 21.8 | 21.9 | 56.8 | 55.8 |
| Canned fruits | 25.8 | 21.3 | 6.4 | 14.0 | 19.6 | 14.6 |
| Dried fruit ..... | ..... | ..... | ..... | 2.1 | 1.2 | .9 |
| Vegetables | | | | | | |
| Beans, string | 13.4 | 12.0 | 14.6 | 15.1 | 11.8 | 11.4 |
| Beets | 9.8 | 7.6 | 10.1 | 14.9 | 9.5 | 6.4 |
| Cabbage and cauliflower.... | 52.1 | 47.6 | 52.8 | 25.7 | 15.3 | 24.3 |
| Carrots | 8.0 | 7.0 | 9.0 | 13.0 | 8.0 | 6.0 |
| Celery | 1.0 | 4.2 | 5.0 | 3.0 | 12.8 | 30.2 |
| Corn | 20.8 | 23.2 | 28.1 | 35.2 | 40.6 | 44.2 |
| Greens ..... | ..... | .4 | .2 | 2.7 | 1.8 | 10.0 |
| Lettuce | 1.9 | 4.3 | 6.5 | 9.4 | 25.9 | 33.5 |
| Onions | 13.9 | 15.0 | 18.5 | 23.5 | 25.9 | 15.3 |
| Peas | 13.3 | 12.0 | 13.0 | 14.0 | 10.0 | 11.0 |
| Potatoes | 172.1 | 168.0 | 194.8 | 151.8 | 143.9 | 140.8 |
| Spinach ..... | ..... | .5 | .3 | 3.0 | 2.0 | 10.7 |
| Squash and pumpkin..... | .7 | .2 | ..... | .8 | .7 | .1 |
| Sweet potatoes | 62.6 | 58.7 | 62.6 | 31.8 | 42.7 | 39.6 |
| Tomatoes | 75.8 | 117.4 | 92.7 | 83.4 | 54.3 | 53.0 |
| Turnips | 8.0 | 7.0 | 9.0 | 13.0 | 8.0 | 6.0 |
| Canned vegetables | 40.7 | 16.4 | 4.9 | 43.2 | 60.3 | 44.9 |
| Dried vegetables | | | | | | |
| Beans | 3.5 | 4.3 | 2.5 | 15.9 | 10.1 | 4.0 |
| Peas | 3.4 | 3.4 | 2.5 | 15.0 | 10.0 | 3.8 |
| Other vegetables | .1 | 1.1 | 5.6 | ..... | ..... | 1.9 |

food actually consumed is usually adequate in energy, more than adequate in protein, but inadequate in iron. Calcium and phosphorus are supplied in ample amounts on the farm, but the urban diet may be deficient in them.

Although the figures in Table 56 contain inaccuracies due to the method of collecting data the consumption trends shown in the different expenditure levels may in all probability be accepted as indicative of the situation that exists. The consumption of protein and mineral yielding foods tend to increase as the expenditure increases. Moreover, among the urban families the diet is in better balance in the higher expenditure levels. The deficiency of mineral-yielding foods in the urban diet, however, is striking in all three expenditure levels. Although protein, calcium, and phosphorus play an important part in the farm diet, the use of iron is relatively low.

For judging the adequacy of a diet a knowledge of the food constituents is necessary, but these factors do not bring out to any great extent differences in food habits. Table 58, which shows from what food groups the families studied here derived their energy, gives a better picture of the types of food utilized by the various families.

The farm families in each expenditure group used milk, cream, and cheese more freely than did the urban families. This result corroborates the figures in Table 56 which show that calcium was supplied much more abundantly by the farm diet than by the urban diet. The use of fats and sweets, and fruits and vegetables, on the other hand, was relatively greater among urban families than among those on the farm, a difference which holds in the three living standard levels. The use of meat, fish and eggs, and cereals is, on the whole, somewhat similar in the two groups, but differences appear among the families designated as poor. The average urban family on this level derived considerably more energy from cereals, and less from meat, fish, and eggs, than did the farm family.

Compared with a standard for well-proportioned diet the food consumed on the farm contained too large a proportion of cereals and not enough fruits and vegetables. The urban family depended too largely on fatty foods, sweets, and cereals, and not enough on milk, cream and cheese, and fruits and vegetables. These results are in harmony with those given in Table 56. As shown there the farm family's diet was adequate in all respects, but iron was relatively lower than the other food constituents. If the consumption of fruits and vegetables were increased on the farm this deficiency

TABLE 58

DISTRIBUTION OF ENERGY AMONG THE VARIOUS FOOD GROUPS AS INDICATED BY 277
FARM AND URBAN FAMILIES IN VIRGINIA, ARRANGED ACCORDING
TO TOTAL FAMILY EXPENDITURE

| Families studied | | Meat fish eggs | Milk cheese cream | Fatty foods sweets | Cereals | Fruits vegetables |
|---|--------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Type | Number | Per cent of total calories | Per cent of total calories | Per cent of total calories | Per cent of total calories | Per cent of total calories |
| Standard for well- proportioned diet ⁵ | | 15-16 | 14-15 | 25-24 | 28-25 | 18-20 |
| Poor group | | | | | | |
| Farm | 40 | 14 | 13 | 25 | 37 | 12 |
| Urban | 35 | 10 | 3 | 30 | 42 | 16 |
| Intermediate group | | | | | | |
| Farm | 85 | 15 | 15 | 25 | 33 | 12 |
| Urban | 78 | 14 | 7 | 31 | 34 | 14 |
| Prosperous group | | | | | | |
| Farm | 12 | 17 | 21 | 23 | 29 | 10 |
| Urban | 27 | 16 | 10 | 30 | 29 | 15 |
| Average ⁶ | | | | | | |
| Farm | 137 | 16 | 17 | 24 | 32 | 11 |
| Urban | 140 | 14 | 7 | 30 | 34 | 15 |

would be made good. The urban family depends largely on foods important only for energy and protein. For an adequate diet the mineral-yielding foods, milk, cream and cheese, fruits and vegetables and whole-grain cereals should be greatly increased.

4. SUMMARY OF FOOD ANALYSIS

This section of the monograph deals with the nutritive value of the food consumed by 137 farm families and 140 urban families in Virginia, divided into three living standard groups designated as poor, intermediate, and prosperous.

The food consumption figures, collected by the survey method, agree with those analyzed by the writer in a previous study in showing that farm families tend to overestimate their consumption, whereas urban families, on the average, probably estimate the amount of food consumed by their families rather accurately.

In the present study the diet of the farm families yielded 41 per cent more energy, 72 per cent more protein, 92 per cent more calcium, 50 per cent more phosphorus, and 25 per cent more iron than

5. Calculated from C. L. Hunt's work—U. S. D. A. Farmer's Bulletin, 1313.

6. Weighted by number of families.

was actually needed. The urban families, on the other hand, consumed food yielding 6 per cent more energy and 9 per cent more protein than was estimated as needed, but the mineral content of the diet was inadequate to meet their need.

To build up their diets the farm families should increase their use of fruits and vegetables, and the urban families, milk, cream, and cheese, and fruits and vegetables. Both groups might advantageously increase their use of whole-grain cereals, but the urban families should reduce the amount of fatty foods and sweets in their diet.

Literature Cited

(1) Hawley, Edith.

1929. A short method of calculating energy, protein, calcium, phosphorus, and iron in the diet. U. S. Dept. Agric. Tech. Bul. No. 105. Jan. 1929, 20 p., illus.

(2) Hawley, Edith.

1927. Dietary scales and standards for measuring a family's nutritive needs. U. S. Dept. Agric. Tech. Bul. No. 8, Nov. 1927, 32 p., illus.

(3) Sherman, H. C.

1926. Chemistry of food and nutrition. N. Y., 1926, 3rd ed.; 636 p., illus.

GENERAL SUMMARY

NUMEROUS standard of living studies have been made in recent years, but none of these has found basis in the State of Virginia. It was largely because of this fact, and also with the idea of testing out certain new methods of attacking problems of this nature that the study reported in the following pages has been made.

The term "living standards" is used in order that the meaning comprehended in the definitions of both the "standard of living" and "standard of life" may be included.

So far as the authors of this monograph have been able to determine, the study presented herein is the first one in which the attempt has been made to consider comparatively within the compass of a single research project such data gathered from both rural and urban communities. It is believed that this approach has been a fertile one with good results.

Another novel method of approach has been to study the problem by fairly well defined groups. Customarily, the plan in the rural studies, at least, has been to select representative areas, in some instances within a given state, in others throughout a number of states, all of the families within the selected area being studied. In this study, both the country and city samples were selected according to three somewhat arbitrarily but fairly well defined classes—the "poor," the "intermediate," and the "prosperous."

The rural sample includes 40 of the "poor" families, with an average expenditure of \$892; 85 families in the "intermediate" group, with an average expenditure of \$1,722; and 12 families in the "prosperous" group, with an average expenditure of \$4,084.

The urban sample consists of 35 families in the "poor" group, averaging \$977 in expenditure; 78 families of the "intermediate", with an average expenditure of \$1,959; and 27 families of the "prosperous" class, averaging \$6,771 in expenditure.

A careful selection of the rural and urban areas studied was made on the basis of typicality for the State of Virginia. Bedford and Culpeper counties, both in the Piedmont area, provided the rural sample, and the entire urban sample came from the city of Lynchburg, with an estimated population of 38,500 in 1926.

If in the rural portion of the state we take the intermediate group as representative of the major number of families, we discover that

below this group there exists a considerable fragment of the farm population whose economic status when measured in money terms is represented by a total annual expenditure but slightly in excess of one-half that of the mass of the farmers, and on the other extreme is to be found another portion of the population whose expenditures are more than one and one-third times greater than the large middle class. We observe in these figures a range of difference between average expenditure of the poor and prosperous of nearly \$3,192.

✓ The primary needs of life—food, clothing, and housing, in the rural sample take slightly more than three-fourths of the total expenditures in the poor families, a little more than two-thirds of the total expenditures of the intermediate group, and slightly less than three-fifths of those designated as prosperous. Thus the poor families, after meeting the basic needs for existence, have spent all but 24 per cent of their total available funds, whereas the prosperous group finds itself possessed of nearly 43 per cent with which to meet needs and desires of life beyond those of pure physical sustenance.

For the combined costs of food, clothing, and shelter, the intermediate group spends approximately 75 per cent more than the poor group; while for the prosperous group these expenses are about twice as great as for the intermediate group.

Although the sample considered in this study was necessarily a limited one, when a fairly comparable group arrangement according to expenditure is made from the study of 2,886 white farm families in eleven different states by the United States Department of Agriculture in 1926, a striking similarity of relationship is shown in the proportions expended for primary wants, and in many other items, as well, in the respective group classifications.

The average value of food used by farm families in the poor group is \$435, in the intermediate group \$678, and in the prosperous group \$995. With respect to the total family expenditures, food constitutes 48.80 per cent for poor families, 39.35 per cent for families of the intermediate group, and only 24.35 per cent for the prosperous group.

On the average, poor farmers supply from their own farms 79.27 per cent of the total value of food which they consume, the intermediate group 84 per cent, and the prosperous 72 per cent. In this connection a comparison with the Kirkpatrick study in eleven other states shows that the Virginia farm in the three economic groups is more nearly self-sustaining with respect to food produced for consumption on their own farms.

However, a surprising number of the poorer group had no gardens whatsoever, and in both the poor and intermediate groups instances could be found where eggs, butter and milk were purchased throughout a good part of the year. The higher percentage of food purchased in the prosperous group is due not so much to a failure to raise food for family use as to the custom of buying certain products which are in a sense precluded to those of lower economic status.

The poor farm families spend for house rent 14.7 per cent of their gross expenditures for family living, the intermediate group 15.6 per cent, and the prosperous 16.6 per cent.

Insofar as the size of house furnishes us with an index of the conditions of living, we may justly infer that for the Virginia farmers the size of house correlates well with the economic grouping. For the poor and intermediate groups we have fairly parallel conditions obtaining for the farmers of Virginia and other states, while the prosperous group in Virginia enjoys an appreciably higher satisfaction when measured by the house space over which the family distributes itself.

✓ In the item of clothing costs, those of the intermediate group are twice as great as those of the poor, but approximately only one-third of the prosperous, while the prosperous is five times greater than the lowest group. On the basis of relationship of clothing costs to the entire living costs for the three groups, we have: poor, 12.68 per cent; intermediate, 13.65 per cent; and prosperous, 16.37 per cent.

An examination of the data reveals the fact that for household operating expenses the Virginia poor farm families spend \$140, or 15.74 per cent of their total living costs; the intermediate group \$296, or 17.19 per cent; while the corresponding figure for the prosperous group amounts to \$756, or 18.5 per cent.

✓ Of all the operating costs, fuel and light are most important in the poor families, where this accounts for 6.86 per cent of the total living expenditures; and least important, relatively, in the prosperous, where the percentage of total living costs is 3.88 per cent. In the poor and intermediate groups the type of lighting is still predominantly the oil lamp.

Forty-three per cent of the farm families of the poor group operate automobiles, while 78 per cent of the farmers in the intermediate group and 100 per cent of those in the prosperous group are able to enjoy the satisfaction of this means of transportation. It is worth noting that the cost of operating the automobile for family use ex-

ceeds the costs of fuel and light for the three groups, ranging among the poor and intermediate groups from two-thirds more than to twice as much as is spent for fuel and light.

✓ Where we observe that in only 5 per cent of the homes of poor farm families do we find running water, baths in none, modern lighting in less than 2 per cent, where no modern heating devices are found, yet where 40 per cent of the families operate automobiles, we may justly question the balance of real values in family living. And what has been said of the poor group respecting the use of automobiles applies in some measure to a considerable part of the intermediate group.

✓ Household furnishings and equipment include such items as furniture, linens, carpets, draperies, pictures, etc. The poor farm families in Virginia spend less than four dollars annually in this field, or less than half of one per cent of their entire living costs. The intermediate group spends 1.47 per cent of its total living fund on this item, while the prosperous spend 1.92 per cent.

Families of the poor farm group in Virginia spend \$23 annually for doctors and dentists, and for medicine. This is equal to 2.59 per cent of all their living costs. The intermediate group spends more than twice as much in dollars, but on the basis of percentage of the total budget, only 32 per cent more. Prosperous families average \$110, nearly twice that of the intermediate group, and a lower percentage of the total living costs for the group.

Ten per cent of the families of the Virginia poor farm group hold insurance, and these pay an average net annual premium of \$31.10; while 38.7 per cent of the intermediate, and 75 per cent of the prosperous group are insured and make net annual premium payments of \$64.80 and \$242.77, respectively.

✓ Poor farm families spend an average of \$20.30 per year for advancement and recreation goods or services, while the intermediate group spends \$81.41, and the prosperous \$297.79. The relationship of these expenditures to the total living costs of the three groups is 2.28 per cent for the poor, 4.73 per cent for the intermediate, and 7.29 per cent for the prosperous. It is apparent that the satisfactions of poor families through this field of expenditure are few in comparison with the higher expenditure groups.

Only five per cent of the fathers in the poor farm families got beyond the grade or country school, while 17.7 per cent of those in the intermediate and 33.3 per cent of those comprising the prosperous group entered high school. Mothers in the poor and intermediate

groups went beyond the grammar school in larger numbers than their husbands. For the prosperous group, the percentage for fathers and mothers was identical.

In the intermediate farm group, which constitutes the bulk of the population, 86.9 per cent of the children graduated from grammar school, and 34.3 per cent from high school; while in the poor group only 65.8 per cent graduated from grammar school and but 20.2 per cent from high school. In the prosperous group, all in the sample graduated from grammar school, and 74.4 per cent from high school. Much higher percentages of the prosperous and intermediate groups enter and complete college than is the case with the poor group.

In a study of the occupational classification of the children of the several farm classes, more of the children of farm families of the poor group are found engaged in the lower occupational grades, such as unskilled and semi-skilled workers, and fewer of them in the upper grades, such as skilled and business and professional employments, where the needs of the work demanded more training and perhaps native ability.

Nearly two-thirds of the farms of poor families were reported as being hilly, while but slightly more than one-third of those of the intermediate group, and only one-sixth of those of the prosperous group were thus classified.

The dwelling of the average farmer in the poor group contains 5.8 rooms of which 3 are devoted to sleeping. The average number of rooms in the home of the intermediate farmer is 7.4, of which 3.7 are bedrooms. Homes of prosperous farmers average 10.6 rooms, with 4.5 reserved for sleeping.

Among poor families, only one-sixth had telephones, while six-tenths of the families of the intermediate group, and all of those in the prosperous group enjoyed this service. Other wide differences existing between the several living standard groups are not lacking and are discussed.

Prosperous farm families spend on the average nearly nineteen hours weekly in reading, which is almost twice the amount of time spent by the intermediate group, and slightly more than three times as much time as poor families devote to this subject.

Visiting friends and neighbors in a social manner is customary in the three farm living standard groups, and to approximately the same extent.

Poor farm families enjoy a negligible amount of specially planned

or ordered entertainment, either within or outside the home. Families of the intermediate group present an appreciably better showing, and the most wholesome situation is found among the prosperous group.

It is not presumed that farm and city living standards are entirely comparable through statistical demonstration, certainly not with the present status of our measuring mechanisms. We need always to keep in mind that rural and urban life in many ways are fundamentally different and that psychological processes and effects are not possible of measurement in such manner as to permit of absolute comparison.

The occupational grades are fairly well defined for each of the three living standard groups in the city. Poor families are confined largely to employments where the degree of skill and ingenuity is not great, as for example, the average textile mill operators, lower grade shop workers, and day laborers. Families of the intermediate group are characterized by employments such as skilled mechanical operators in the mills and factories, clerical workers in offices, banks, and stores, sales work and similar grades of activity. The prosperous group is represented in the main by the professional types, owners and higher executives in the business field, and families of independent means which are no longer actually engaged in business.

✓ Poor city families spend \$366, or 37.43 per cent of their total living costs for food. Intermediate group families spend \$564, or 28.81 per cent of the total costs. Among the prosperous city families food costs average \$860 a year, or only 12.7 per cent of their total living costs.

✓ Poor families in the city spend least among all the groups for food with an average daily cost of 29.6 cents per day for each adult individual comprising the family, while the prosperous farm family ranks highest, with an average daily expenditure per individual of 50.7 cents.

Reduced to an average monthly expenditure, poor families spent \$9.92, intermediate families \$22.99, and prosperous families \$76.14 for clothing. This represents 12.22 per cent of the total living costs in the poor group, 14.09 per cent in the intermediate group, and 13.49 per cent in the prosperous.

✓ Observation of the dress of the poor families bears proof of inadequacy. The member of the family most limited in clothing wants is the homemaker—the mother in most instances. Her sacrifice is often severe, and not infrequently she prefers to remain at home all the

time with no socializing contacts rather than to supply herself with a minimum of "visiting" clothes, if to do so would be reflected in clothing purchases for the children. This limitation is not apparent in the intermediate group of city families, and unquestionably not in the prosperous group.

Expenditures for housing are of second importance in the living costs of city families of the poor group where they amount to \$161, or 16.49 per cent of total living costs. In the intermediate group, this item is third in importance, costing \$332, or 16.94 per cent of the total living costs. Prosperous families average an annual rental expenditure of \$1,365, or 20.16 per cent of their total costs, and this item takes first place in the list of all their living expenditures.

On the basis that the number of rooms should approximate and tend to be in excess of the number in the family, poor city families fall at least 10 per cent below the level of adequacy. Intermediate and prosperous families are adequately provided for on this basis. However, in the poor and intermediate groups, the farm families enjoy a much preferable situation in this regard.

Primary wants—food, clothing and shelter—absorb \$646, or 66 per cent of the total living costs in the poor city families; \$1,172, or 60 per cent with the intermediate group, and 3,138, or 46 per cent among the prosperous.

Among poor city families, household operating costs average \$158, and represent 16 per cent of the total living costs. Intermediate group families spend \$364, or 19 per cent of their total living costs for such purposes; while prosperous families attain the high expenditure of \$1,355, or 20 per cent of all living costs.

Fuel and light costs in city families mount rapidly as we ascend the social scale, those of the prosperous group being four times as great as those of the poor, while the intermediate families fall between the poor and the prosperous in this item. However, such costs are 6.83 per cent of all living costs among the poor, 5.61 per cent among the intermediate, and 3.89 per cent with the prosperous.

The automobile finds a less widespread use among city families than among farm families. Among the poor families, 25.7 per cent have cars; 37.2 per cent of the families of the intermediate group, and 85.2 per cent of the prosperous families possess cars.

The poor families in the city average about five times as great an expenditure as the similar farm group for household furnishings and equipment. In the intermediate and prosperous groups, the propor-

tionate expenditure is approximately twice as great as in the corresponding farm groups.

Among poor families, those in the city spend for health costs 65 per cent more than those on the farm, intermediate city families 53 per cent more, and prosperous city families 103 per cent more.

Investment in insurance is more prevalent among city families than among farm families. The poor group averages annual premium payments for insurance amounting to \$49, the intermediate group \$78, and the prosperous group \$539. As a percentage of total living costs, the city families of the poor group average 5 per cent, the intermediate 4 per cent, and the prosperous 8 per cent of the total living costs applied to insurance.

Both in absolute amount and relatively the city families spend more heavily for cultural things. In both country and city, the amount spent increases as we progress from the poor to the prosperous families, and the percentage of the total budget which these items claim increased likewise.

Poor families in both country and city contribute proportionally more out of their total advancement and recreation fund for the church and charity than do the intermediate and prosperous families.

City families spend more than farm families for newspapers, magazines, and books. But if the city families average a higher dollar expenditure for reading matter, the farm families show a higher percentage of their total advancement and recreation costs attributable to reading matter, and in the case of the intermediate and prosperous families a higher proportion of their total family living costs.

The city families in each group average a smaller number of living children per family than the farm groups.

A higher percentage of the parents in the poor families completed elementary schooling in the city than on the farm. In the intermediate group the number completing grammar school varied but slightly. The higher educational attainment of parents in prosperous city families embraced a much larger percentage of the total number.

The children in the poor city families averaged 6.7 years of schooling as compared with 7.3 years for the farm children in the same group. The accomplishment of the city and farm children of the intermediate group is about the same—8.7 years and 8.9 years respectively. Children in the prosperous city group show 11 years as an average attainment, but this is one year below the accomplishment of children in prosperous farm families.

Unskilled occupations take a much larger percentage of the children of poor families. Semi-skilled and skilled rate high in the intermediate group, as does also the business and professional class. In the prosperous families the children who are now engaged in occupations other than attendance at school are found most numerous in business and professional work.

Poor city families in this study reported the principal wage-earner as employed on an average of 9.3 hours daily for five days in the week, and 4.5 hours on Saturday, with Sunday generally free. Intermediate families averaged 8.9 hours on the same basis and prosperous families 7.1 hours.

✓ Farm families exceed in each group the corresponding city group in time spent in reading, with poor farm families reading about as much as intermediate city families and with prosperous farm families spending over 50 per cent more time in reading than city families of the same group.

✓ It is in the prosperous city group that most frequent and regular visiting is done within the community and outside. Among these families, two-thirds average two or more extended trips per year for pleasure and rest. Among poor families over nine-tenths report no visits of this nature whatsoever.

✓ One might expect that among city families much more entertainment would be experienced outside the home than inside. Yet the findings tend to the inference that a considerable amount of recreation of a lighter sort is experienced by the family with friends at home.

✓ Of the 35 poor city families visited in this study, all inhabited frame dwelling houses. With an average of 4.3 persons occupying an average of 3.9 rooms, conditions can be wholesome under ordinary circumstances. Stoves and open fireplaces are the customary form of heating, and 43 per cent of the homes of poor families use oil lamps for lighting. Only one-sixth of the houses were equipped with bath facilities.

✓ The physical comforts and conveniences of the intermediate group exceed those of the corresponding farm group. The prosperous city family comes closest to an approximation of the ideal physical compensations of farm life, due to a greater freedom of space than is true in the other two city groups.

In the present study the diet of the farm families yielded 41 per cent more energy, 72 per cent more protein, 92 per cent more cal-

cium, 50 per cent more phosphorus, and 25 per cent more iron than was actually needed. The urban families, on the other hand, consumed food yielding 6 per cent more energy and 9 per cent more protein than was estimated as needed, but the mineral content of the diet was inadequate to meet their need.

✓ To build up their diets, the farm families should increase their use of fruits and vegetables, and the urban families, milk, cream and cheese, and fruits and vegetables. Both groups might advantageously increase their use of whole-grain cereals, but the urban families should reduce the amount of fatty foods and sweets in their diet.

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